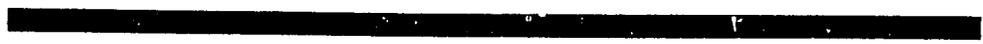


PN-AR 5-100

# Selected Health and Demographic Statistics

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USAID Assisted Countries

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## Latin America and the Caribbean

April 1990



Center for International Health Information  
USAID Health Information System  
1601 N. Kent Street  
Suite 1001  
Arlington, Virginia 22209  
(703) 524-5225

The Center for International Health Information, a division of ISTI, operates the USAID Health Information System under the Child Survival Action Program – Support project, #936-5951.13, contract number DPE 5951-Z-00-8004-00 with the Office of Health, Bureau of Science and Technology, U.S. Agency for International Development.

The Center for International Health Information  
Barton R. Burkhalter, Ph.D., Director  
1601 N. Kent Street, Suite 1001  
Arlington, VA 22209  
(703) 524-5225  
FAX (703) 243-4669

COUNTRIES INCLUDED IN THIS REPORT

Belize . . . . .	5
Bolivia . . . . .	8
Colombia . . . . .	11
Costa Rica . . . . .	14
Dominican Republic . . . . .	17
Ecuador . . . . .	20
El Salvador . . . . .	23
Guatemala . . . . .	26
Haiti . . . . .	29
Honduras . . . . .	32
Jamaica . . . . .	35
Peru . . . . .	38

## NOTES

The tables in this report display values of the child survival indicators for USAID supported countries in the Latin America and Caribbean Region. These values are stored in the USAID Health Information System and were the most current available as of March, 1990. The accompanying graphs portray trends in those indicators where longitudinal data on annual basis is generally available.

The sources from which the data come are presented on the tables and graphs. Among those sources, reference is made to the FY 1989 USAID Mission Response Form (M.R.F.). That form was returned by USAID field missions along with the 1989 Health and Child Survival Project Questionnaires. One part of the form was a request for comments/updates on the data in the USAID Health Information System in August, 1989. The updates received from the USAID missions proved to be extremely valuable in providing more current data than that available from other sources.

On the tables, the notation N/A is used to signal the non-availability of a value for a particular indicator.

On the graphs presenting trends in vaccination coverage, a range of estimates from Demographic and Health surveys is included where available. The reader should be aware that this range is based on coverage in children 12 to 23 months of age at the time of the survey irrespective of the age at which the vaccinations were administered. The title on the Y-axis of those graphs, "Pct. vaccinated by 12 months of age", applies to the longitudinal trend line but not to the points denoting the range suggested by the DHS survey.

## INDICATOR DEFINITIONS

### DEMOGRAPHIC INDICATORS

- 1) TOTAL POPULATION: Mid-year estimate of the total number of individuals in a country.
- 2) INFANT MORTALITY RATE (IMR): The estimated number of deaths in infants (children under age one) in a given year per 1,000 live births in that same year. An IMR may be calculated by direct methods (counting births and deaths) or by indirect methods (applying well-established demographic models).
- 3) LIFE EXPECTANCY AT BIRTH: An estimate of the average number of years a newborn can expect to live. Life expectancy is computed from age-specific death rates for a given year. It should be noted that low life expectancies in developing countries are, in large part, due to high infant mortality.

- 4) CHILDREN UNDER AGE 1: Mid-year estimate of the total number of children under age one.
- 5) ANNUAL INFANT DEATHS: An estimate of the number of deaths occurring to children under age one in a given year.
- 6) TOTAL FERTILITY RATE: An estimate of the average number of children a woman would bear during her lifetime given current age-specific fertility rates.

#### VACCINATION COVERAGE RATES

- 7) VACCINATION COVERAGE IN CHILDREN: An estimate of the proportion of living children between the ages of 12 and 23 months who have been vaccinated before their first birthday -- three times in the cases of polio and DPT and once for both measles and BCG. Vaccination coverage rates are calculated in two ways. Administrative estimates are based on reports of the number of vaccines administered divided by an estimate of the pool of children eligible for vaccination. Survey estimates are based on sample surveys of children in the target age group and may or may not include children without vaccination cards whose mothers recall that their children had been vaccinated.
- 8) VACCINATION COVERAGE IN MOTHERS: An estimate of the proportion of women in a given time period who have received two doses of tetanus toxoid during their pregnancies. Currently under worldwide review, this indicator is being changed to account for the cumulative effect of tetanus toxoid boosters. A woman and her baby are protected against tetanus when a mother has had only one or, perhaps, no boosters during a given pregnancy so long as the woman had received the appropriate number of boosters in the years preceding the pregnancy in question. (The appropriate number of boosters required during any given pregnancy varies with number received previously and the time elapsed.) The revised indicator is referred to as TT2+. Rates are computed using administrative methods or surveys.

#### ORAL REHYDRATION THERAPY

- 9) ORS ACCESS RATE: An estimate of the proportion of the population under age five with reasonable access to a trained provider of Oral Rehydration Salts (ORS) who receives adequate supplies. This is a particularly difficult indicator to measure and, therefore, it may fluctuate dramatically from year to year as improved methods of estimation are devised.

- 10) **ORT USE RATE:** An estimate of the proportion of all cases of diarrhea in children under age five treated with ORS and/or a recommended home fluid. ORT use may be determined using administrative means or surveys. In general, administrative estimates are based on estimates of the number of episodes of diarrhea in the target population for a given year and the quantity of ORS available. Thus, changes in the estimates of the frequency of diarrhea episodes can alter the ORT Use Rate as well as "real" changes in the pattern of use. Surveys are more precise in that they focus on the actual behavior of mothers in treating diarrhea in the two-week period prior to the survey.

#### CONTRACEPTIVE PREVALENCE

- 11) **CONTRACEPTIVE PREVALENCE RATE:** An estimate of the proportion of women, aged 15 through 44 (or, in some countries, 15 through 49), in union or married, currently using a modern method of contraception. Where sources fail to distinguish modern and traditional methods, the combined rate is shown.

#### NUTRITION

- 12) **ADEQUATE NUTRITIONAL STATUS:** An individual child of a certain age is said to be adequately nourished if his/her weight is greater than the weight corresponding to "two Z-scores" (two standard deviations) below the median weight achieved by children of that age. The median weight and the distribution of weights around that median in a healthy population are taken from a standard established by the National Center For Health Statistics, endorsed by the World Health Organization. The indicator for the population as a whole is the proportion of children 12 through 23 months of age who are adequately nourished.
- 13) **APPROPRIATE INFANT FEEDING:** A composite estimate of the proportion of infants (children under age one) being breastfed and receiving other foods at an appropriate age according to the following criteria: breastfed through infancy with no bottle-feeding, exclusively breastfed through four months (120 days) of age, and receiving other foods if over six months of age (181 days). Water is not acceptable in the first four months (120 days). ORS is considered acceptable at any age. Surveys are the only source of data to form this indicator. Surveys yield an estimate of how many children in the target group (children under age one) are being fed correctly at the moment of the survey. They do not give an indication of the proportion of individual children fed appropriately throughout their first year of life.

A number of sub-indicators may be calculated from the data used to form the composite, of which two are presented in this report.

**EXCLUSIVELY BREASTFED:** an estimate of the proportion of infants through four months (120 days) of age who receive no foods or liquids other than breast milk.

**INTRODUCTION OF SOLIDS:** an estimate of the proportion of infants over six months (181 days) of age still breastfeeding but also receiving complementary weaning foods.

- 14) **MEDIAN DURATION OF BREASTFEEDING:** an estimate of the median duration of breastfeeding computed from cross-sectional survey data using the Current Status Method. According to this method, the value reported is the month at which half of the children surveyed are no longer breastfed.

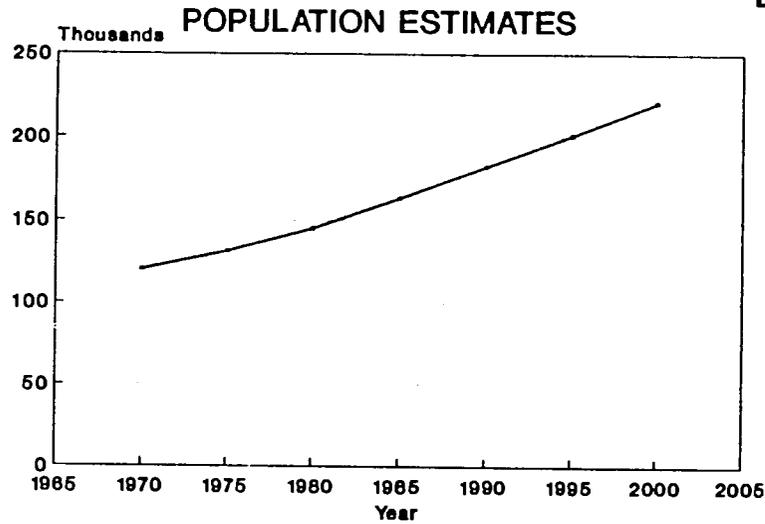
## BELIZE

## THE MOST CURRENT VALUES FOR SELECTED INDICATORS

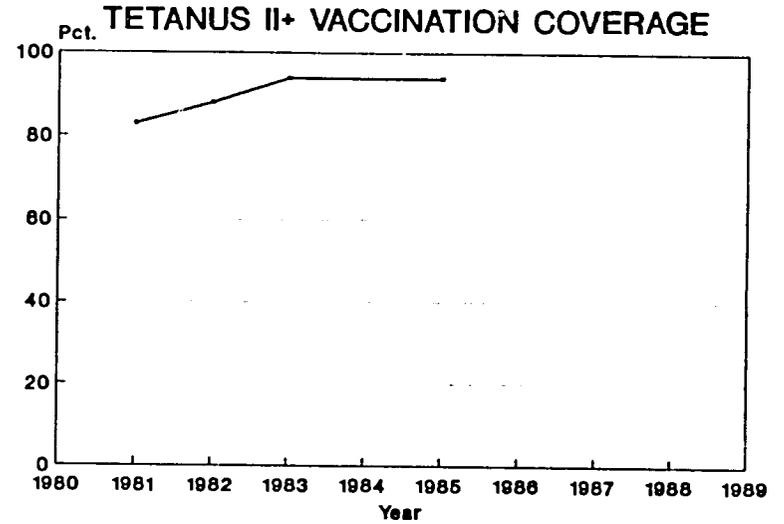
<u>Demographic Indicators</u>	<u>Value</u>	<u>Year</u>	<u>Source</u>
Total Population	173,000	1989	A
Infant Mortality Rate	25/1000	1987	B
Life Expectancy At Birth	68 Yrs	1989	A
Children Under Age 1	6,000	1989	A
Annual Infant Deaths	< 1,000	1989	A
Total Fertility Rate	5.1	1989	A
<u>Child Survival Indicators</u>			
Immunization Coverage			
BCG	97%	1988	C
DPT III	73%	1988	C
Measles	70%	1988	C
Polio III	73%	1988	C
Tetanus II+	94%	1985	D
Oral Rehydration Therapy			
ORS Access Rate	100.0%	1988	E
ORT Use Rate	65.0%	1986	E
Contraceptive Prevalence (Modern)	32%	1985	F
Adequate Nutritional Status	N/A		
Appropriate Infant Feeding	N/A		
a) Exclusive Breastfeeding	N/A		
b) Introduction Of Solids	N/A		
Median Duration Of Breastfeeding	N/A		

- A World Population Prospects: 1988, prepared by the Estimates and Projections Section of the Population Division of the Department of International Economic and Social Affairs, United Nations.
- B A.I.D. FY 89 Action Plan, Belize as cited in Burleigh, Elizabeth, "Central American Initiative: Trends In Health and Nutrition, 1980 to 1987", forthcoming.
- C World Health Organization Expanded Programme on Immunization, Report WHO/EPI/CEIS/90.1, January, 1990.
- D World Health Organization Expanded Programme on Immunization, Report of July, 1987.
- E World Health Organization, Diarrhoeal Disease Control Programme, Estimates of ORS Access and ORS/ORT Use Rates By Country and Region, 1988 (Table transmitted on facsimile dated 3/27/90).
- F 1985 Survey as cited in World Population Profile: 1989, U.S. Department of Commerce Bureau of the Census, September, 1989.

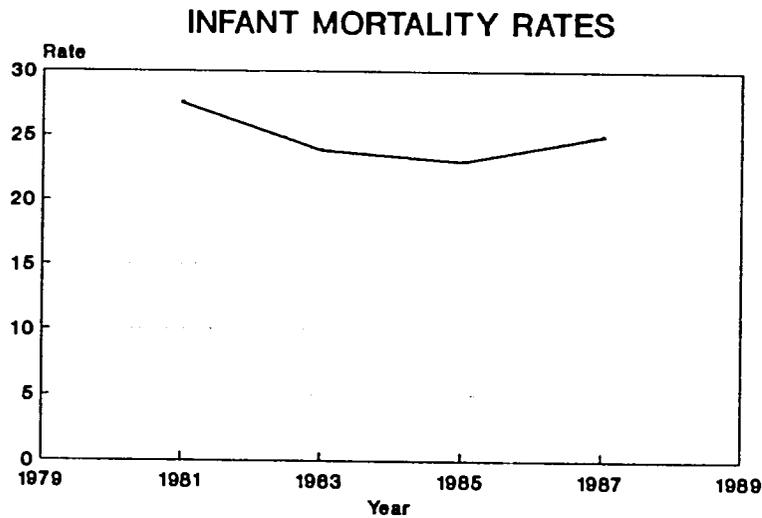
# BELIZE



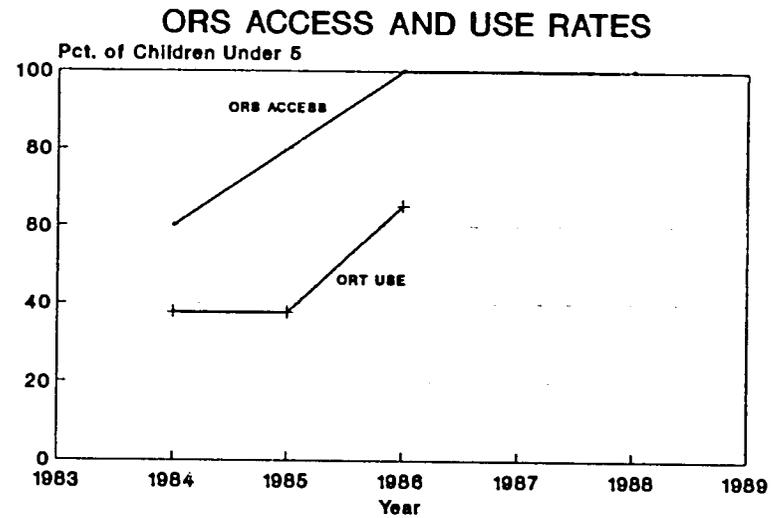
SOURCE: United Nations,  
World Population Prospects, 1988



SOURCE: World Health Organization  
Annual Reports of the EPI Programme

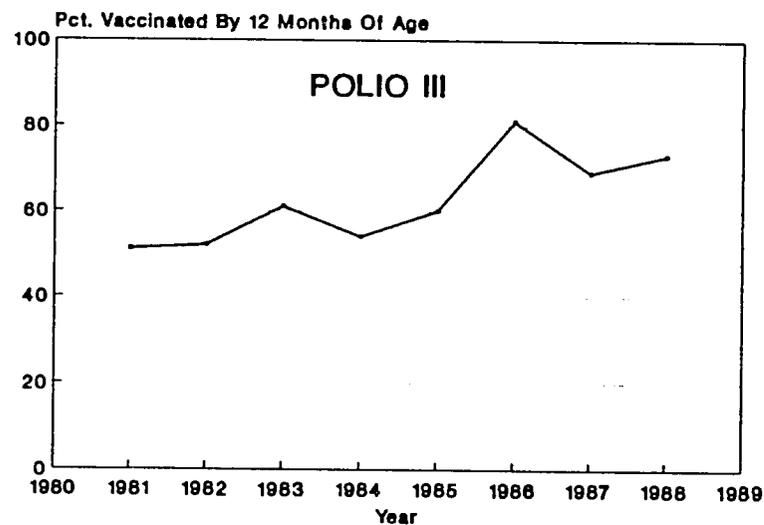
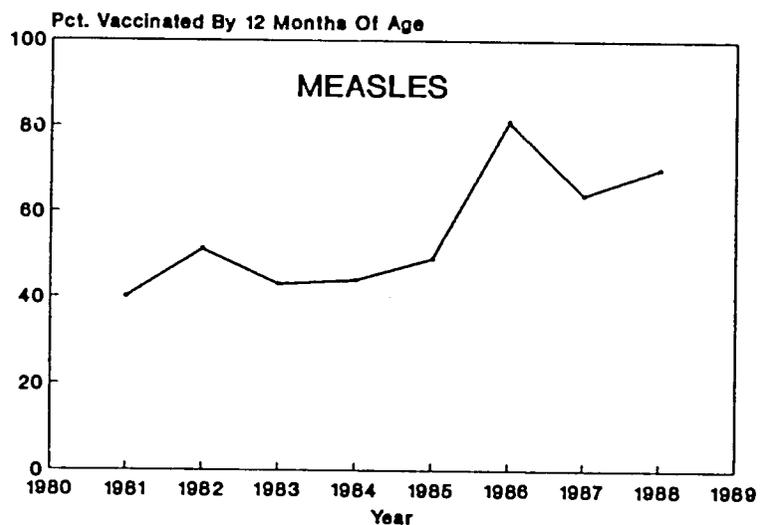
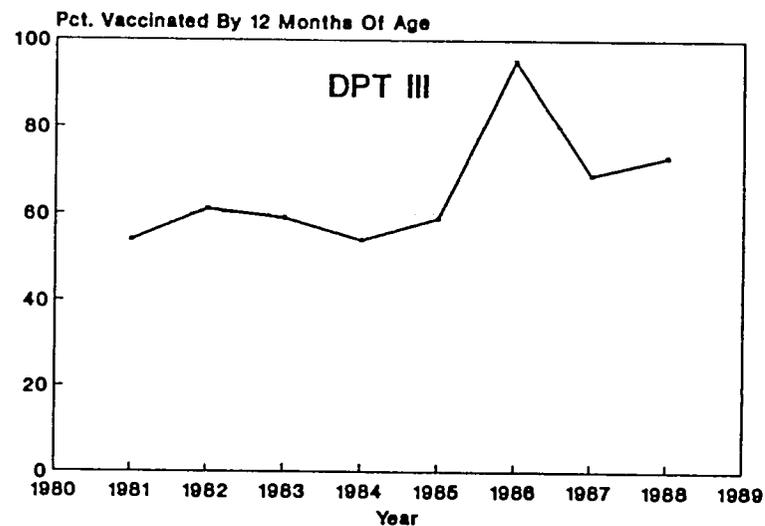
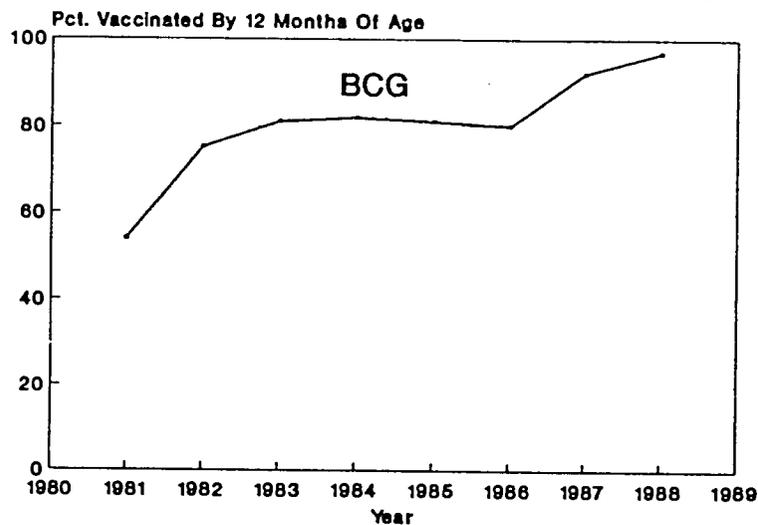


SOURCE: Ministry of Health as cited in  
forthcoming "Central America Initiative  
Health and Nutrition Indicators..."



SOURCE: World Health Organization,  
Annual Reports of the Programme for  
Control of Diarrhoeal Diseases

# VACCINATION COVERAGE RATES IN BELIZE



SOURCE: WHO, Annual Reports of the EPI Programme

CIHI, ISTI; 3/90

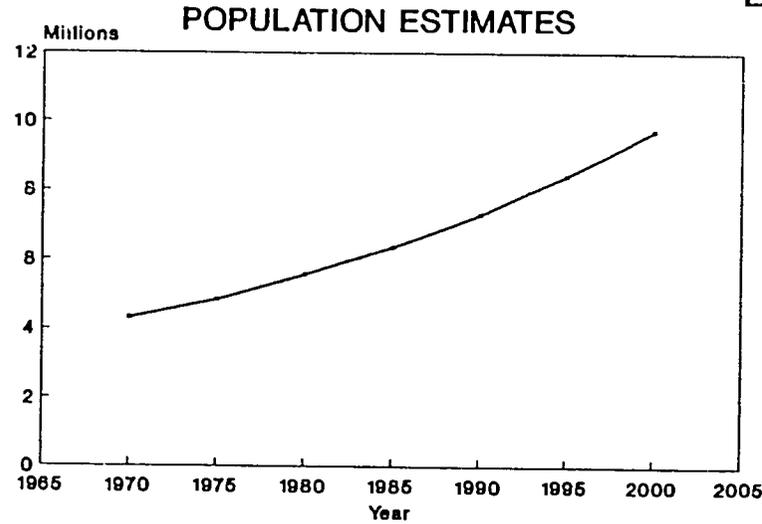
## BOLIVIA

## THE MOST CURRENT VALUES FOR SELECTED INDICATORS

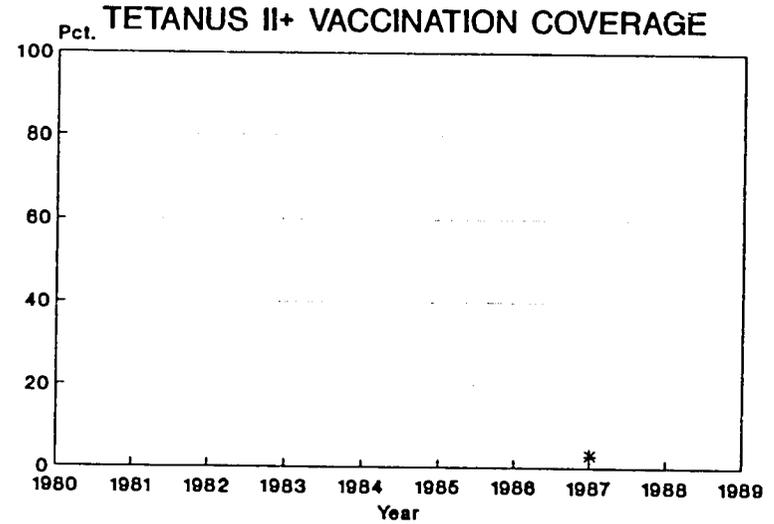
<u>Demographic Indicators</u>	<u>Value</u>	<u>Year</u>	<u>Source</u>
Total Population	7,113,000	1989	A
Infant Mortality Rate	105/1000	1989	A
Life Expectancy At Birth	54 Yrs	1989	A
Children Under Age 1	279,000	1989	A
Annual Infant Deaths	32,000	1989	A
Total Fertility Rate	6.0	1989	A
<u>Child Survival Indicators</u>			
Immunization Coverage			
BCG	54.9%	1989	B
DPT III	28.4%	1989	B
Measles	57.5%	1989	B
Polio III	37.8%	1989	B
Tetanus II+	3%	1987	C
Oral Rehydration Therapy			
ORS Access Rate	40%	1988	D
ORT Use Rate	34%	1989	B
Contraceptive Prevalence (Modern)	12%	1989	B
Adequate Nutritional Status	81%	1989	B
Appropriate Infant Feeding	51%	1989	B
a) Exclusive Breastfeeding	55%		
b) Introduction Of Solids	39%		
Median Duration Of Breastfeeding	16.6 Mos	1989	B

- A World Population Prospects: 1988, prepared by the Estimates and Projections Section of the Population Division of the Department of International Economic and Social Affairs, United Nations.
- B Encuesta Nacional de Demografía y Salud, 1989, Instituto Nacional de Estadística and Demographic Health Surveys/Institute for Resource Development/Macro Systems, Inc. (The method of computation of vaccination coverage rates is based on an analysis of the comparability of mother's recall to actual data recorded on cards in seven countries. The "correction factor" for mother's recall so determined was applied to those children without cards whose mothers remembered their children as having received at least one vaccination. These figures do not appear on the accompanying graphs.)
- C World Health Organization Expanded Programme on Immunization, Report EPI/MISC/89.2.
- D World Health Organization, Diarrhoeal Disease Control Programme, Estimates of ORS Access and ORS/ORT Use Rates By Country and Region, 1988 (Table transmitted on facsimile dated 3/27/90).

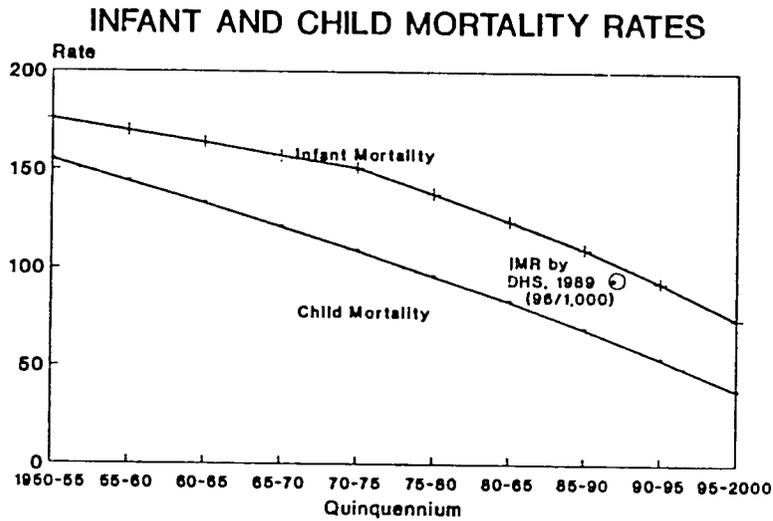
# BOLIVIA



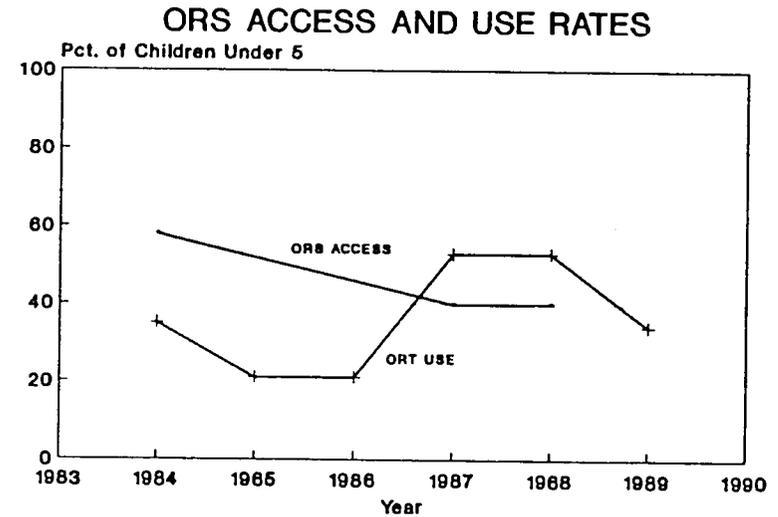
SOURCE: United Nations, World Population Prospects, 1988



SOURCE: World Health Organization Annual Reports of the EPI Programme

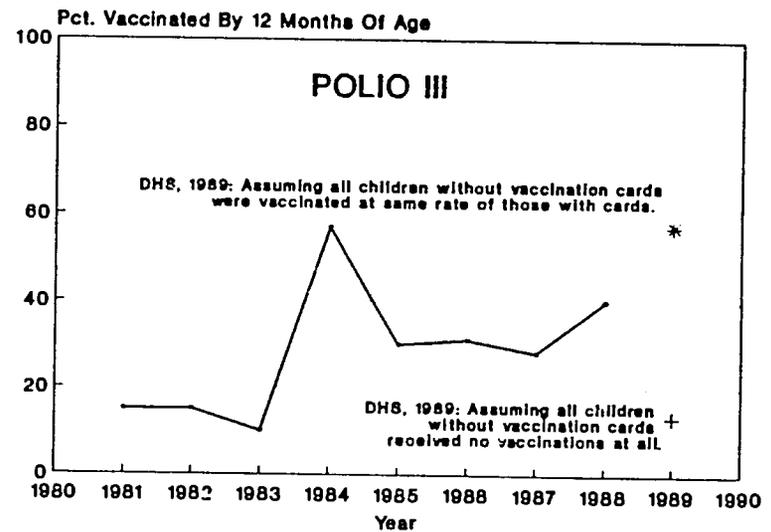
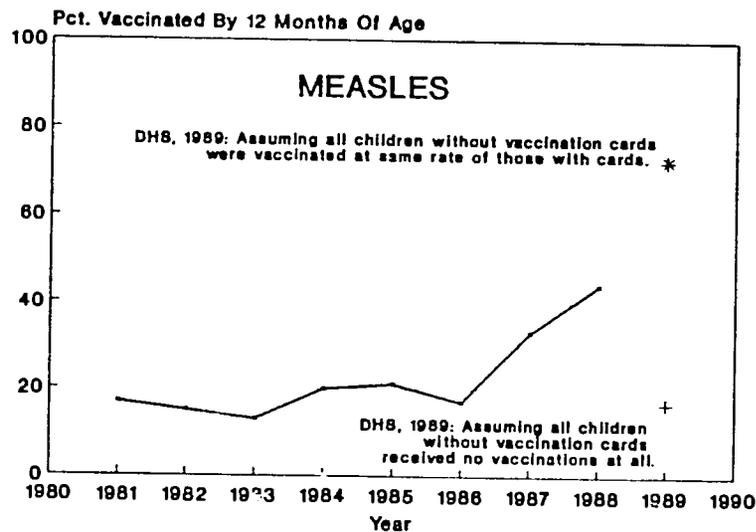
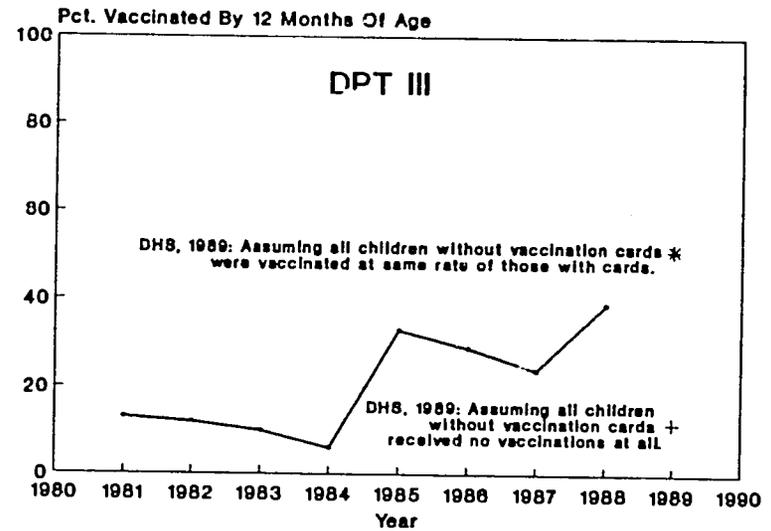
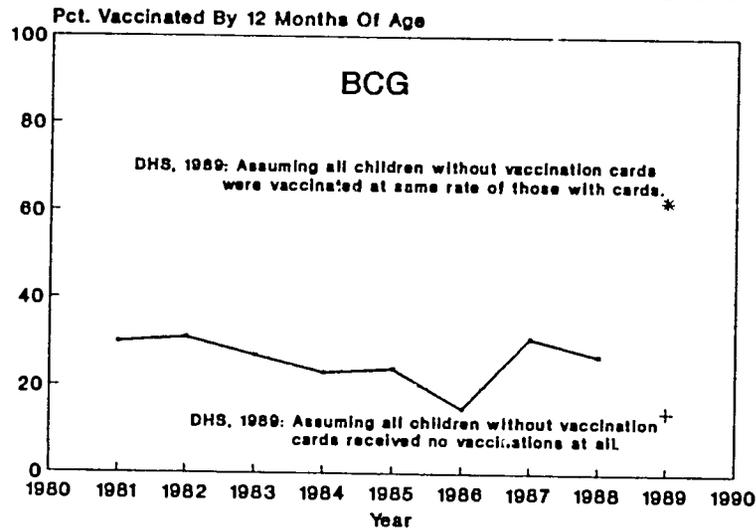


SOURCE: United Nations, 1988  
1) World Population Prospects, and  
2) Mortality of Children Under Age 5



SOURCE: World Health Organization, Annual Reports of the CDD Programme (1989 Use: DHS, 1989)

## VACCINATION COVERAGE RATES IN BOLIVIA



SOURCE: WHO, Annual Reports of the EPI Programme

CIHI, ISTI; 3/90

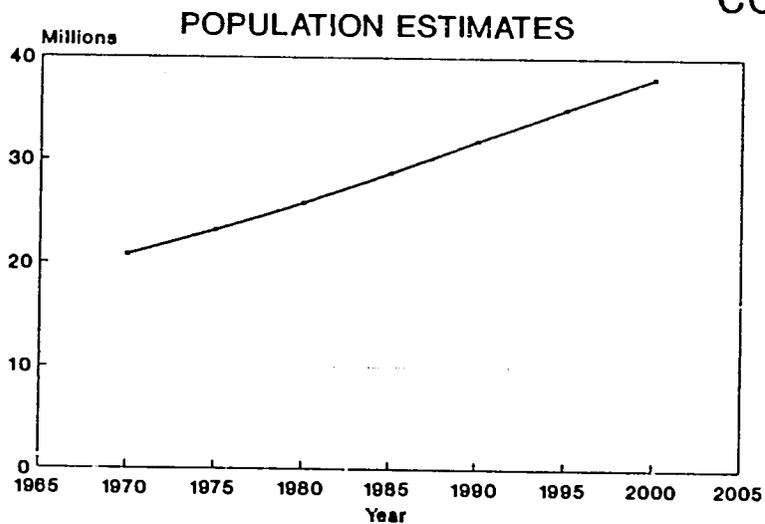
## COLOMBIA

## THE MOST CURRENT VALUES FOR SELECTED INDICATORS

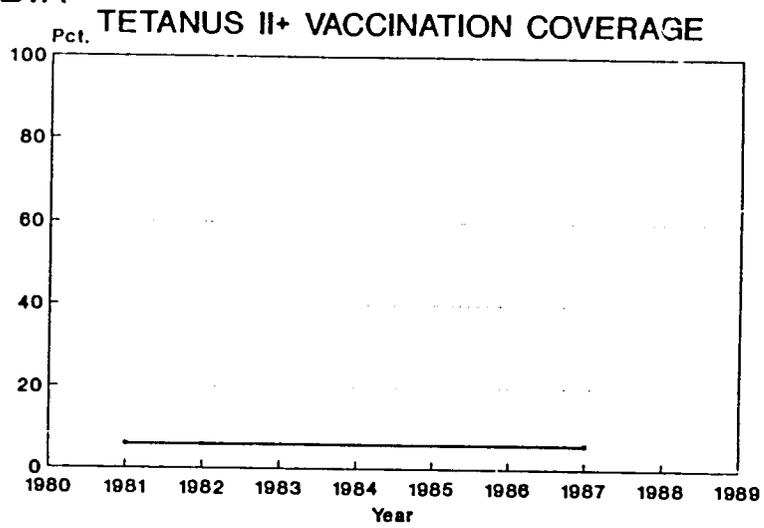
<u>Demographic Indicators</u>	<u>Value</u>	<u>Year</u>	<u>Source</u>
Total Population	31,192,000	1989	A
Infant Mortality Rate	45/1000	1989	A
Life Expectancy At Birth	65 Yrs	1989	A
Children Under Age 1	266,000	1989	A
Annual Infant Deaths	40,000	1989	A
Total Fertility Rate	3.5	1989	A
<u>Child Survival Indicators</u>			
Immunization Coverage			
BCG	99%	1988	B
DPT III	74%	1988	B
Measles	74%	1988	B
Polio III	94%	1988	B
Tetanus II+	6%	1987	B
Oral Rehydration Therapy			
ORS Access Rate	62%	1988	C
ORT Use Rate	48%	1987	D
Contraceptive Prevalence (Modern)	53%	1986	E
Adequate Nutritional Status	75.4%	1986	E
Appropriate Infant Feeding	N/A		
a) Exclusive Breastfeeding	18%	1986	E
b) Introduction Of Solids	13%	1986	E
Median Duration Of Breastfeeding	N/A		

- A World Population Prospects: 1988, prepared by the Estimates and Projections Section of the Population Division of the Department of International Economic and Social Affairs, United Nations.
- B World Health Organization Expanded Programme on Immunization, Report WHO/EPI/CEIS/90.1, January, 1990.
- C World Health Organization, Diarrhoeal Disease Control Programme, Estimates of ORS Access and ORS/ORT Use Rates By Country and Region, 1988 (Table transmitted on facsimile dated 3/27/90).
- D World Health Organization, Diarrhoeal Disease Control Programme, Interim Programme Report, 1988, Report WHO/CDD/89.31 (an advanced copy marked "DRAFT").
- E Encuesta de Prevalencia Demografia y Salud: 1986, Demographic and Health Surveys, Institute for Resource Development/Westinghouse.

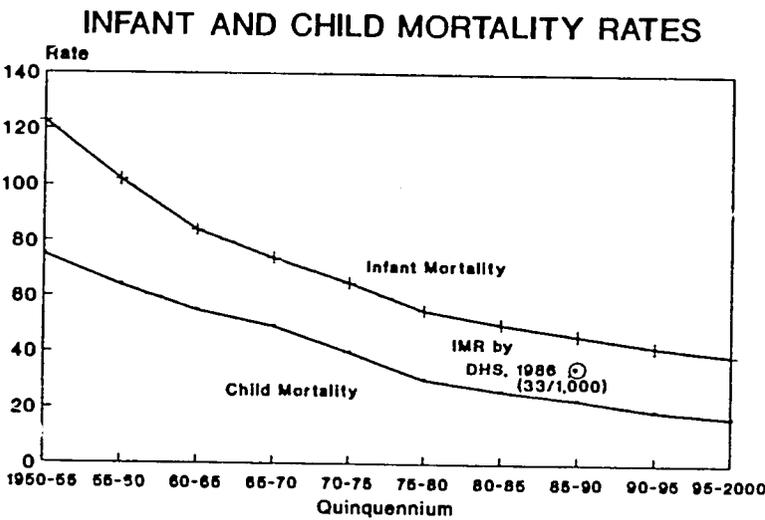
# COLOMBIA



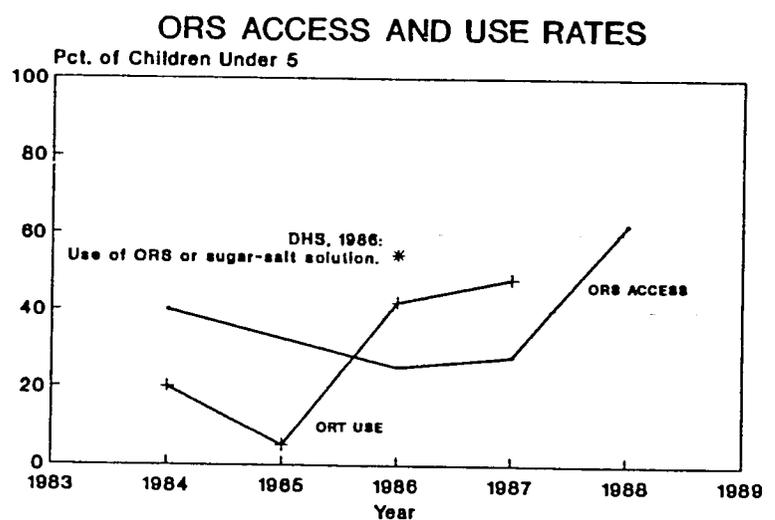
SOURCE: United Nations, World Population Prospects, 1988



SOURCE: World Health Organization Annual Reports of the EPI Programme

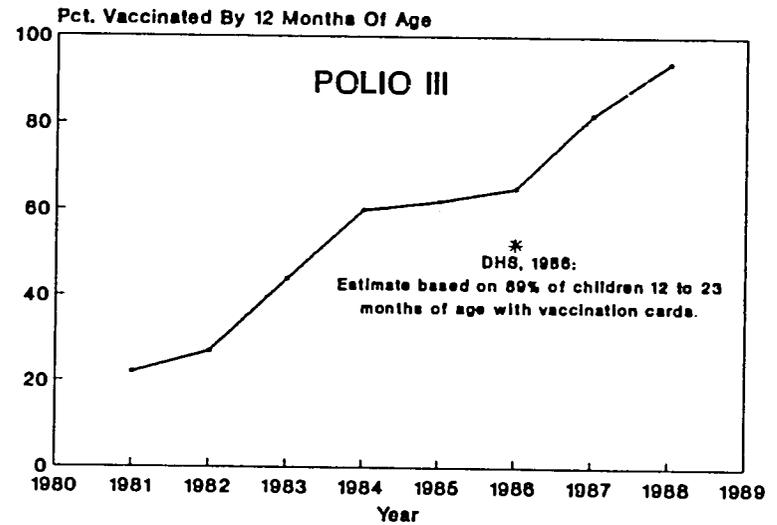
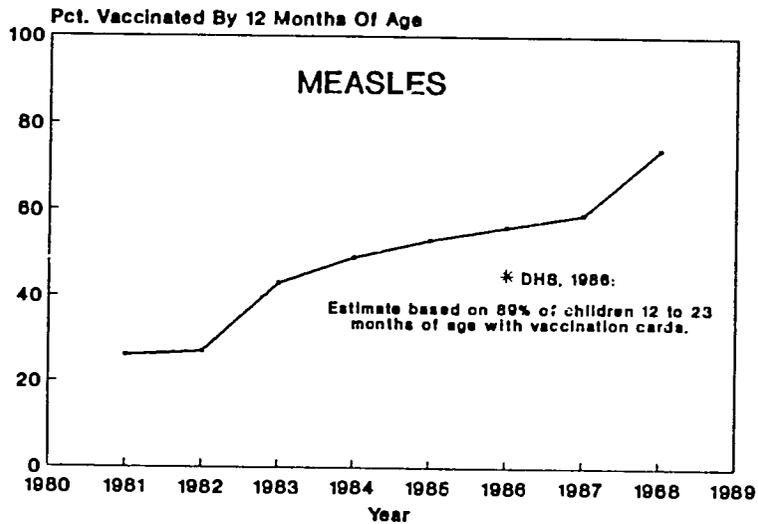
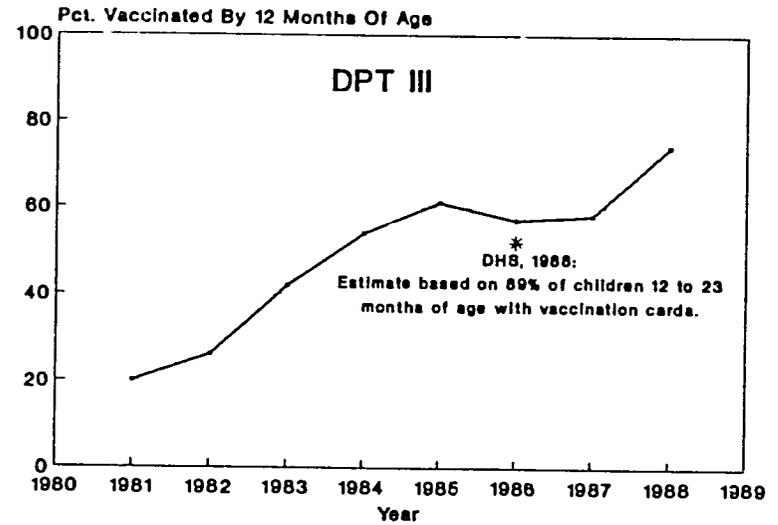
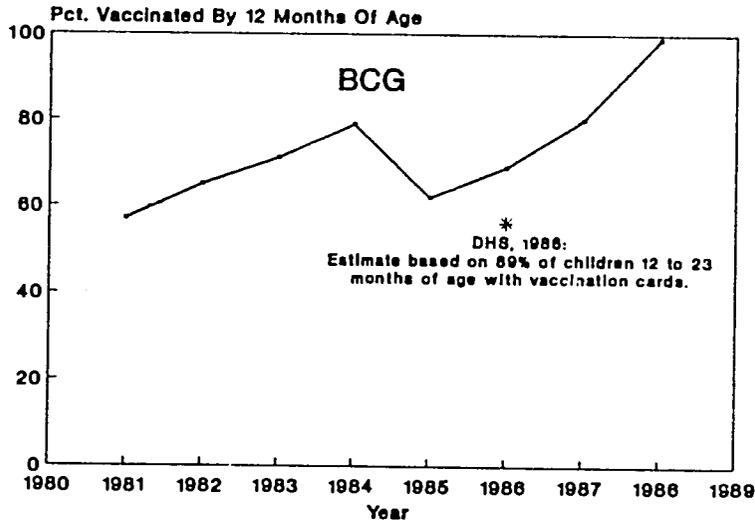


SOURCE: United Nations, 1988  
1) World Population Prospects, and  
2) Mortality of Children Under Age 5



SOURCE: World Health Organization, Annual Reports of the Programme for Control of Diarrhoeal Diseases

## VACCINATION COVERAGE RATES IN COLOMBIA



SOURCE: WHO, Annual Reports of the EPI Programme

CIHI, ISTI; 3/90

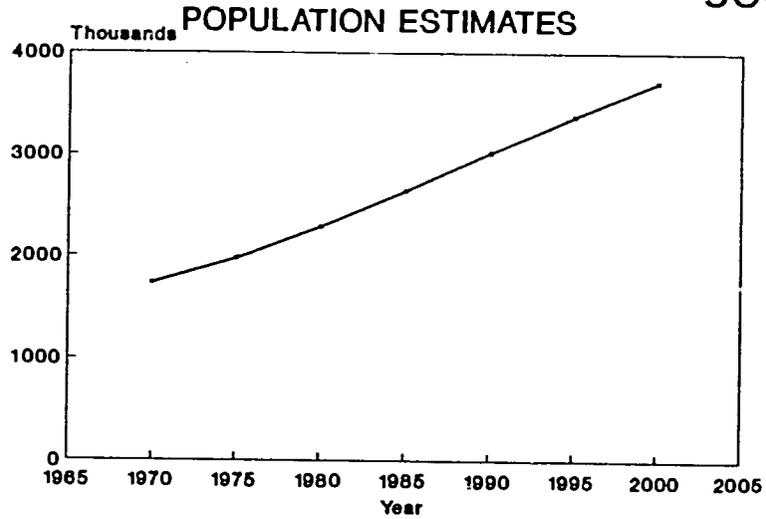
## COSTA RICA

## THE MOST CURRENT VALUES FOR SELECTED INDICATORS

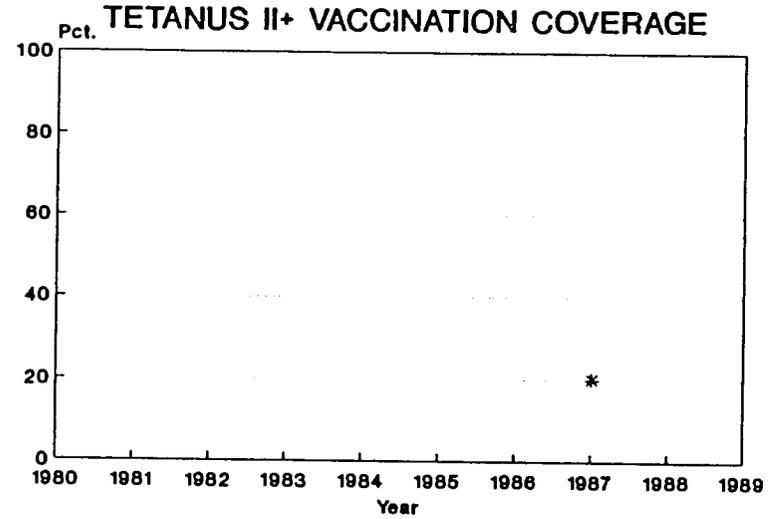
<u>Demographic Indicators</u>	<u>Value</u>	<u>Year</u>	<u>Source</u>
Total Population	2,941,000	1989	A
Infant Mortality Rate	18/1000	1989	A
Life Expectancy At Birth	75 Yrs	1989	A
Children Under Age 1	80,000	1989	A
Annual Infant Deaths	1,000	1989	A
Total Fertility Rate	3.2	1989	A
<u>Child Survival Indicators</u>			
<u>Immunization Coverage</u>			
BCG	87%	1988	B
DPT III	87%	1988	B
Measles	97%	1988	B
Polio III	86%	1988	B
Tetanus II+	20%	1987	B
<u>Oral Rehydration Therapy</u>			
ORS Access Rate	90.0%	1988	C
ORT Use Rate	78.0%	1987	C
Contraceptive Prevalence (Modern)	54%	1986	D
Adequate Nutritional Status	N/A		
Appropriate Infant Feeding	N/A		
a) Exclusive Breastfeeding	N/A		
b) Introduction Of Solids	N/A		
Median Duration Of Breastfeeding	N/A		

- A World Population Prospects: 1988, prepared by the Estimates and Projections Section of the Population Division of the Department of International Economic and Social Affairs, United Nations.
- B World Health Organization Expanded Programme on Immunization, Report WHO/EPI/CEIS/90.1, January, 1990. (Figure for coverage with measles vaccination includes vaccines given to children 12 to 60 months of age.)
- C World Health Organization, Diarrhoeal Disease Control Programme, Estimates of ORS Access and ORS/ORT Use Rates By Country and Region, 1988 (Table transmitted on facsimile dated 3/27/90).
- D 1986 Survey as cited in World Population Profile: 1989, U.S. Department of Commerce Bureau of the Census, September, 1989.

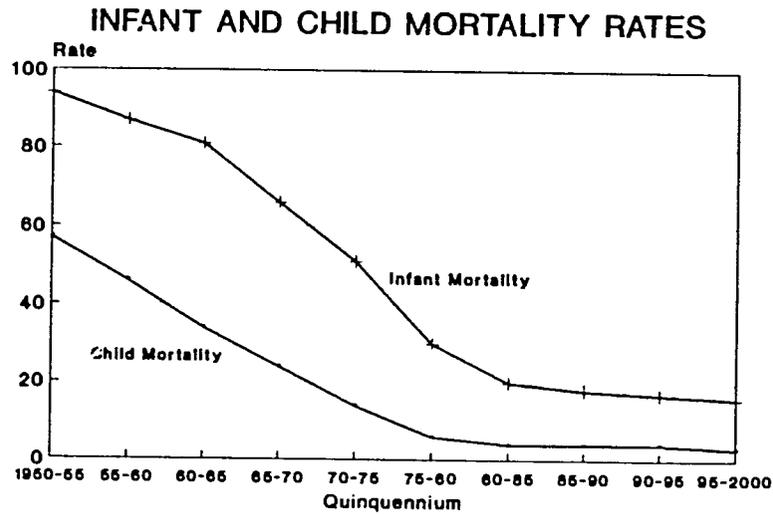
# COSTA RICA



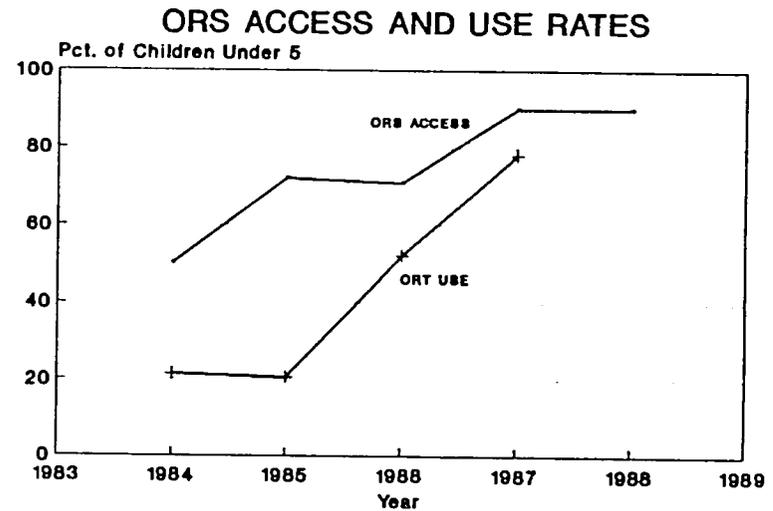
SOURCE: United Nations, World Population Prospects, 1988



SOURCE: World Health Organization Annual Reports of the EPI Programme

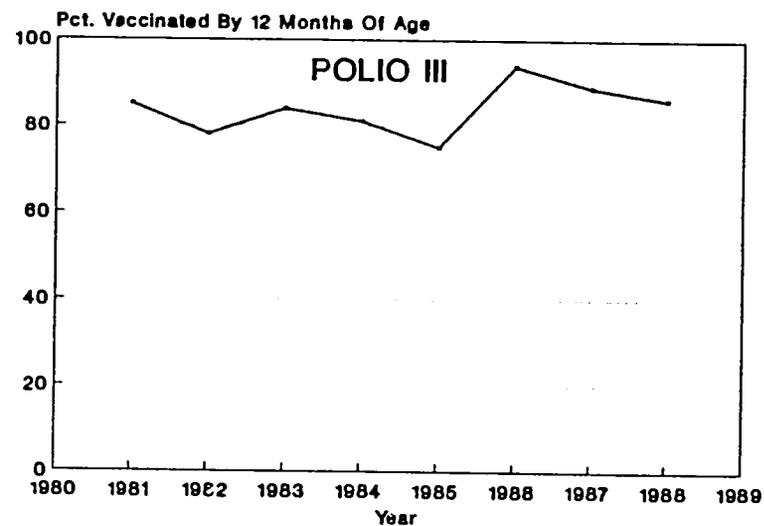
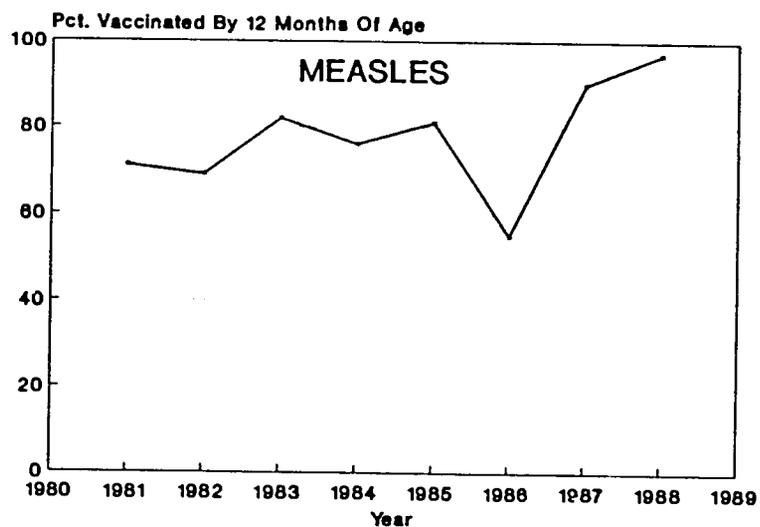
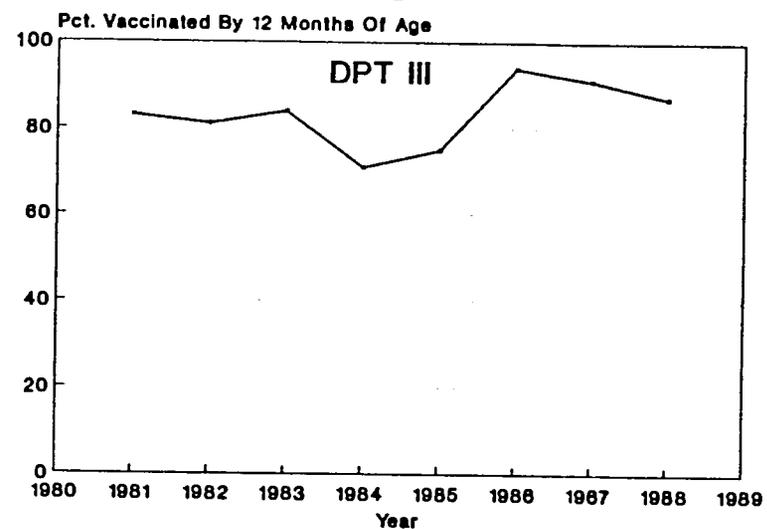
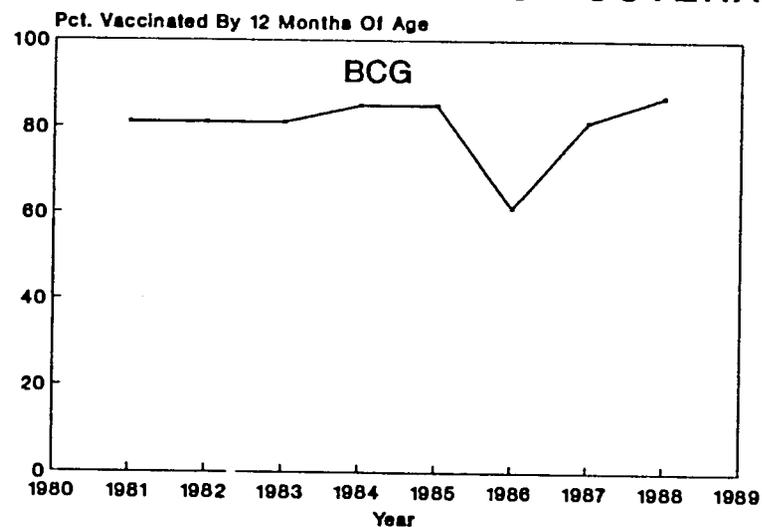


SOURCE: United Nations, 1988  
1) World Population Prospects, and  
2) Mortality of Children Under Age 5



SOURCE: World Health Organization, Annual Reports of the Programme for Control of Diarrhoeal Diseases

## VACCINATION COVERAGE RATES IN COSTA RICA



SOURCE: WHO, Annual Reports of the EPI Programme

CIHI, ISTI; 3/90

## DOMINICAN REPUBLIC

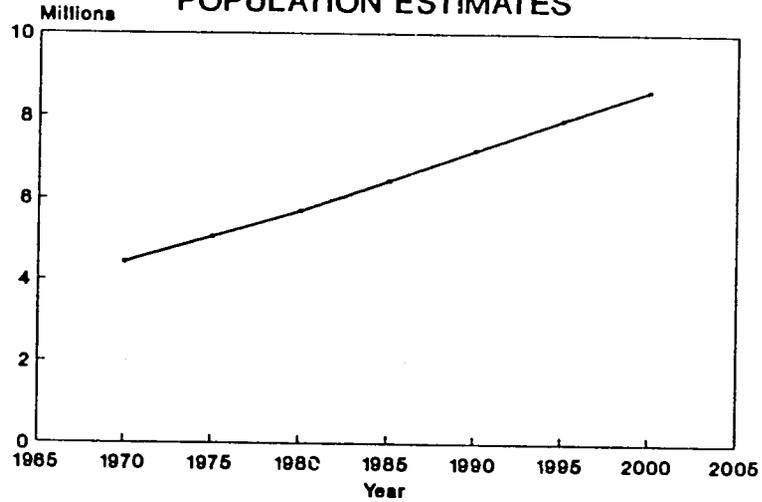
## THE MOST CURRENT VALUES FOR SELECTED INDICATORS

<u>Demographic Indicators</u>	<u>Value</u>	<u>Year</u>	<u>Source</u>
Total Population	7,018,000	1989	A
Infant Mortality Rate	63/1000	1989	A
Life Expectancy At Birth	66 Yrs	1989	A
Children Under Age 1	204,000	1989	A
Annual Infant Deaths	13,000	1989	A
Total Fertility Rate	3.6	1989	A
<u>Child Survival Indicators</u>			
Immunization Coverage			
BCG	38%	1988	B
DPT III	39%	1988	B
Measles	26%	1988	B
Polio III	64%	1988	B
Tetanus II+	25%	1987	B
Oral Rehydration Therapy			
ORS Access Rate	50%	1987	C
ORT Use Rate	51%	1988	C
Contraceptive Prevalence (Modern)	47%	1986	D
Adequate Nutritional Status	N/A		
Appropriate Infant Feeding	N/A		
a) Exclusive Breastfeeding	13%	1986	D
b) Introduction Of Solids	11%	1986	D
Median Duration Of Breastfeeding	N/A		

- A World Population Prospects: 1988, prepared by the Estimates and Projections Section of the Population Division of the Department of International Economic and Social Affairs, United Nations.
- B World Health Organization Expanded Programme on Immunization, Report WHO/EPI/CEIS/90.1, January, 1990.
- C World Health Organization, Diarrhoeal Disease Control Programme, Estimates of ORS Access and ORS/ORT Use Rates By Country and Region, 1988 (Table transmitted on facsimile dated 3/27/90).
- D Encuesta Demográfica y de Salud, 1986, Consejo Nacional de Población y Familia (CONAPOFA) and Demographic and Health Surveys, Institute for Resource Development/Westinghouse.

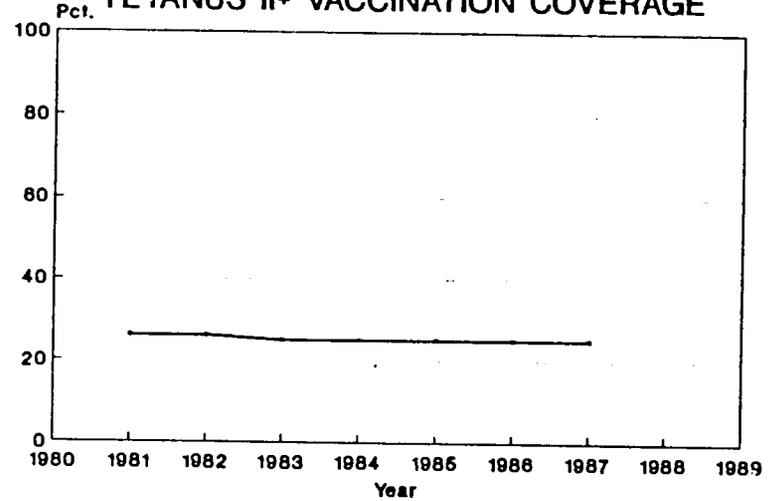
# DOMINICAN REPUBLIC

## POPULATION ESTIMATES



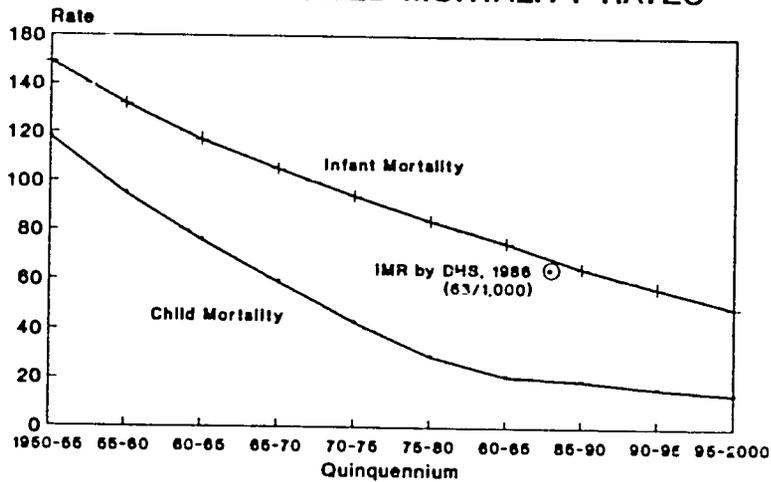
SOURCE: United Nations,  
World Population Prospects, 1988

## TETANUS II+ VACCINATION COVERAGE



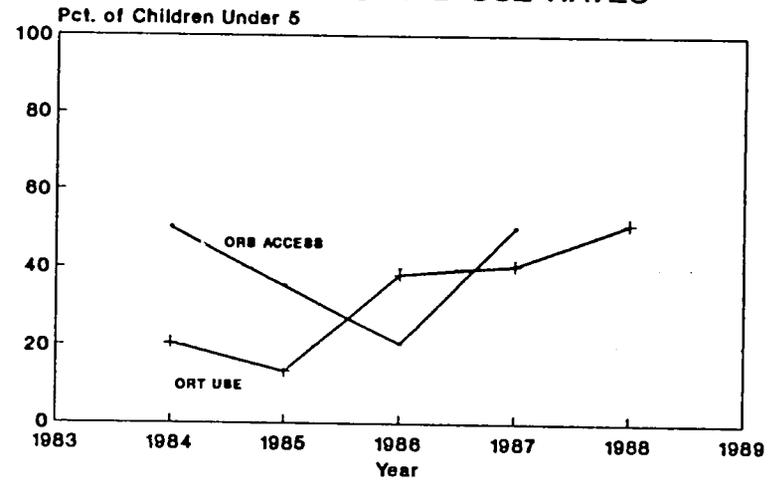
SOURCE: World Health Organization  
Annual Reports of the EPI Programme

## INFANT AND CHILD MORTALITY RATES



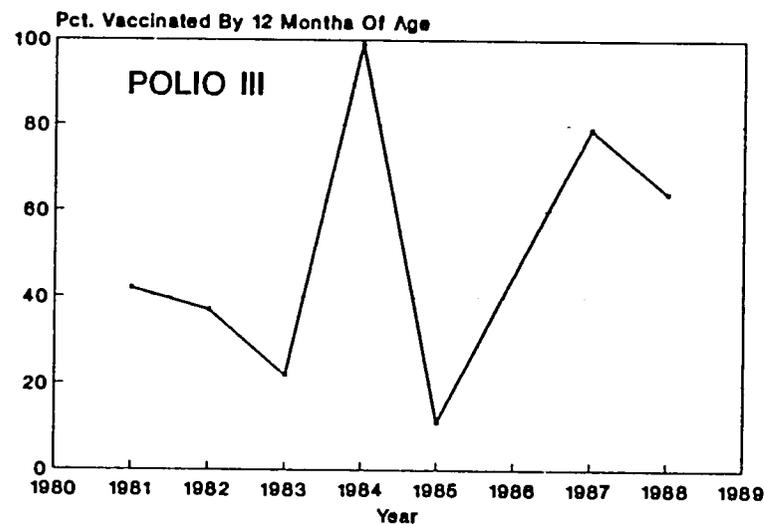
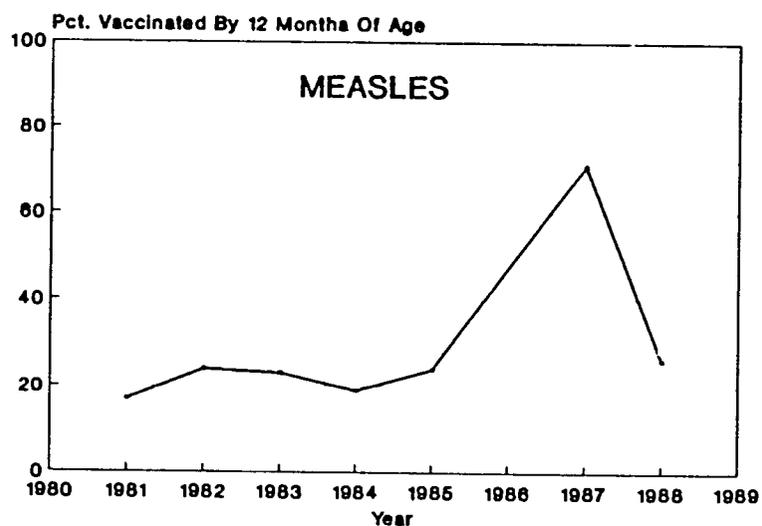
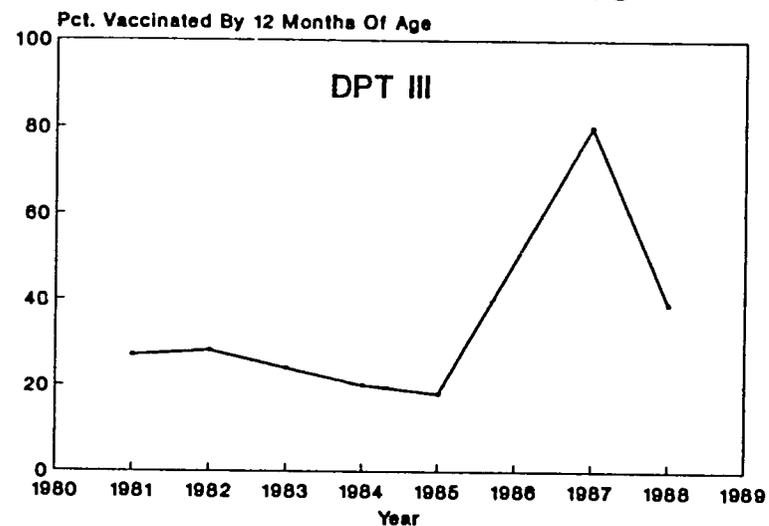
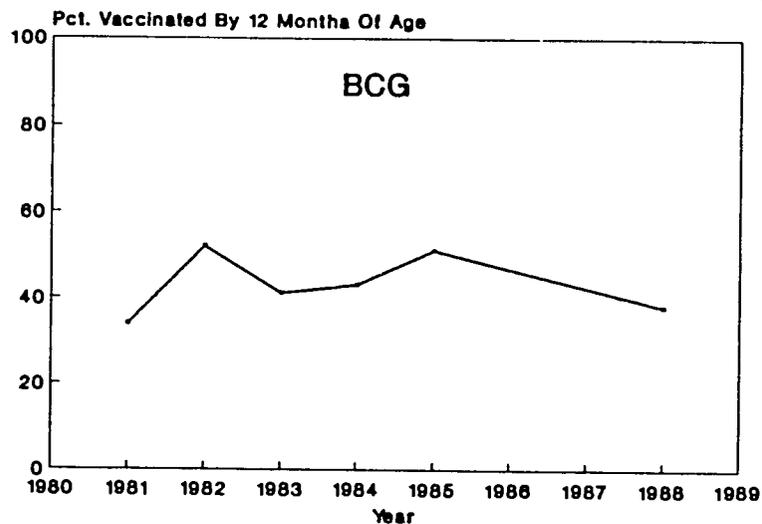
SOURCE: United Nations, 1988  
1) World Population Prospects, and  
2) Mortality of Children Under Age 5

## ORS ACCESS AND USE RATES



SOURCE: World Health Organization,  
Annual Reports of the CDD Programme  
(1986 Use Rate: DHS, 1986)

# VACCINATION COVERAGE RATES IN THE DOMINICAN REPUBLIC



SOURCE: WHO, Annual Reports of the EPI Programme

CIHI, ISTI; 3/90

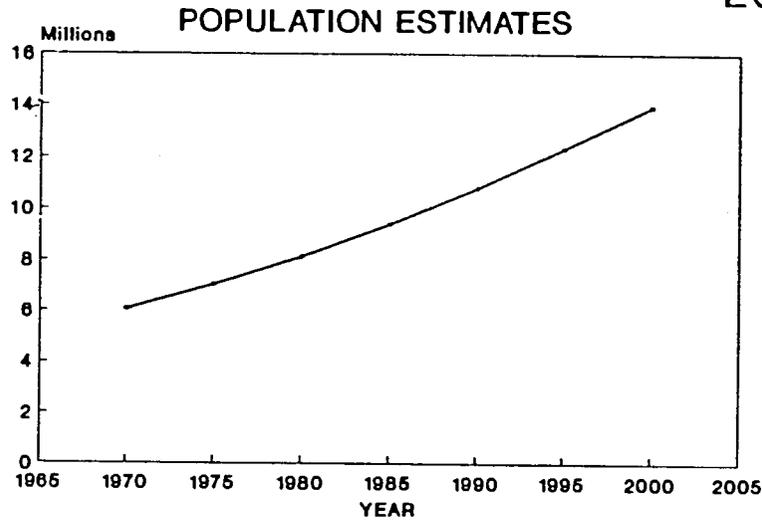
## ECUADOR

## THE MOST CURRENT VALUES FOR SELECTED INDICATORS

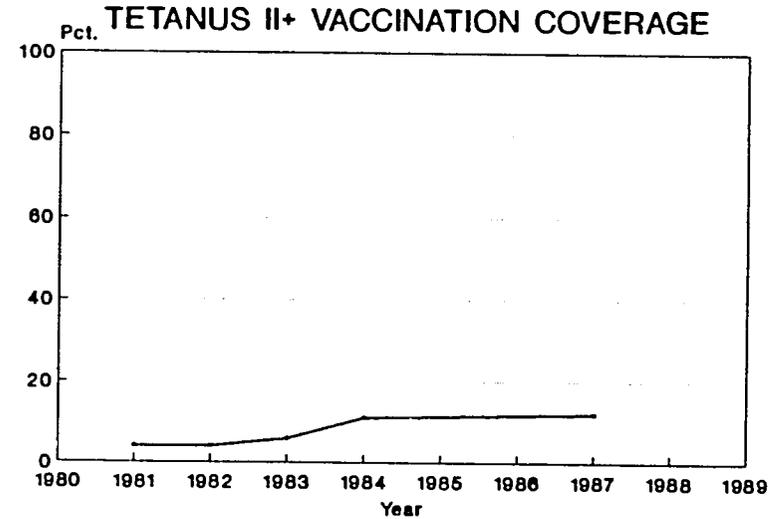
<u>Demographic Indicators</u>	<u>Value</u>	<u>Year</u>	<u>Source</u>
Total Population	10,490,000	1989	A
Infant Mortality Rate	51/1000	1987	B
Life Expectancy At Birth	66 Yrs	1989	A
Children Under Age 1	350,000	1989	A
Annual Infant Deaths	22,000	1989	A
Total Fertility Rate	3.8	1989	C
<u>Child Survival Indicators</u>			
Immunization Coverage			
BCG	86%	1988	D
DPT III	54%	1988	D
Measles	52%	1988	D
Polio III	57%	1988	D
Tetanus II+	12%	1987	D
Oral Rehydration Therapy			
ORS Access Rate	55%	1988	E
ORT Use Rate	24%	1987	E
Contraceptive Prevalence (Modern)	42%	1989	C
Adequate Nutritional Status	76%	1987	G
Appropriate Infant Feeding	24%	1987	F
a) Exclusive Breastfeeding	27%		
b) Introduction Of Solids	15%		
Median Duration Of Breastfeeding	13.9 Mos	1987	F

- A World Population Prospects: 1988, prepared by the Estimates and Projections Section of the Population Division of the Department of International Economic and Social Affairs, United Nations.
- B Rutstein, Shea Oscar, Fermo, Aurora V., and Crespo, Antonio, "Child Survival In Ecuador", a Report to the USAID Mission in Ecuador, 4 November, 1987.
- C Preliminary data from "Encuesta Nacional Demográfica y de Mortalidad Materno y Infantil", 1989.
- D World Health Organization Expanded Programme on Immunization, Report WHO/EPI/CEIS/90.1, January, 1990.
- E World Health Organization, Diarrhoeal Disease Control Programme, Estimates of ORS Access and ORS/ORT Use Rates By Country and Region, 1988 (Table transmitted on facsimile dated 3/27/90).
- F Encuesta Demográfica y de Salud: 1987, Demographic and Health Surveys, Institute for Resource Development/ Westinghouse.
- G National Nutrition Survey, 1987, Ministry of Health.

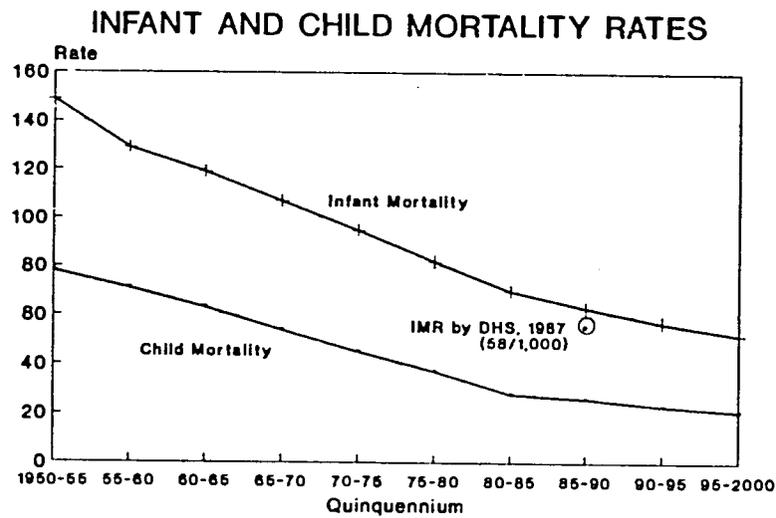
# ECUADOR



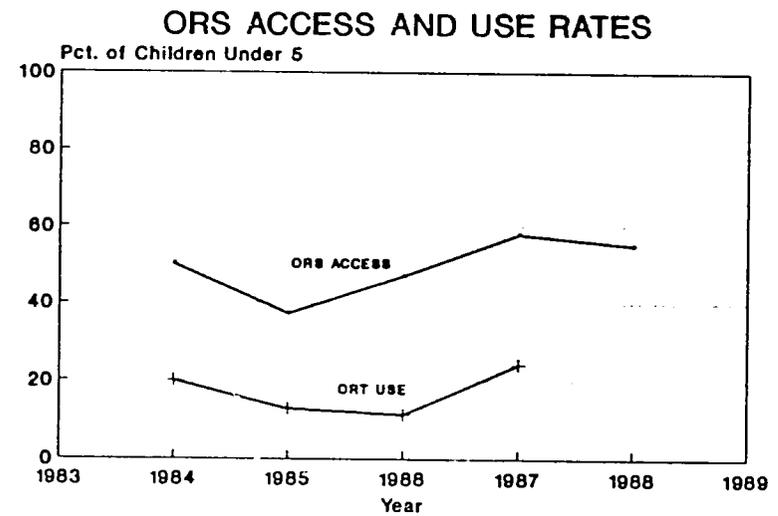
SOURCE: United Nations, World Population Prospects, 1988



SOURCE: World Health Organization Annual Reports of the EPI Programme

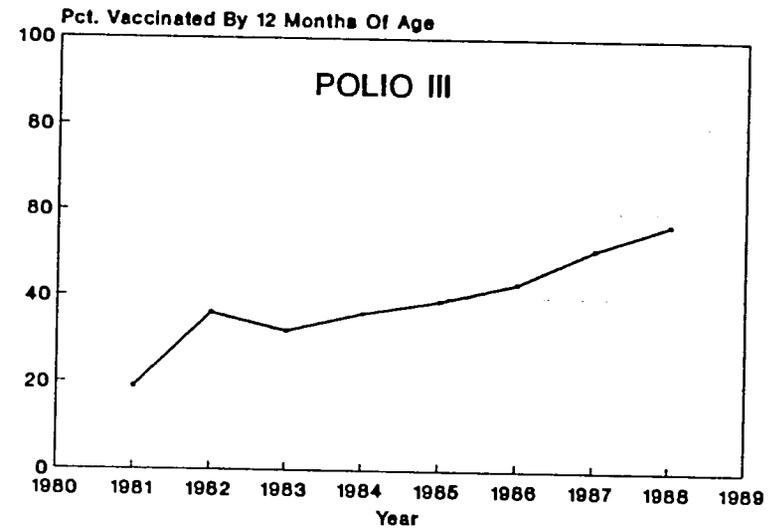
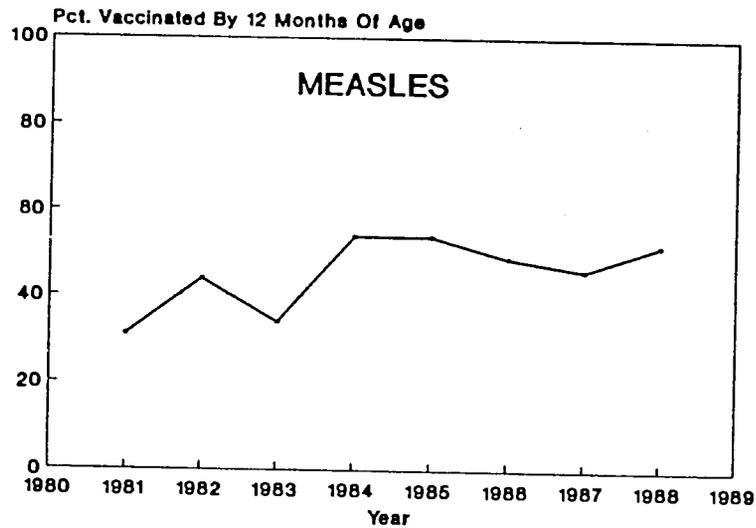
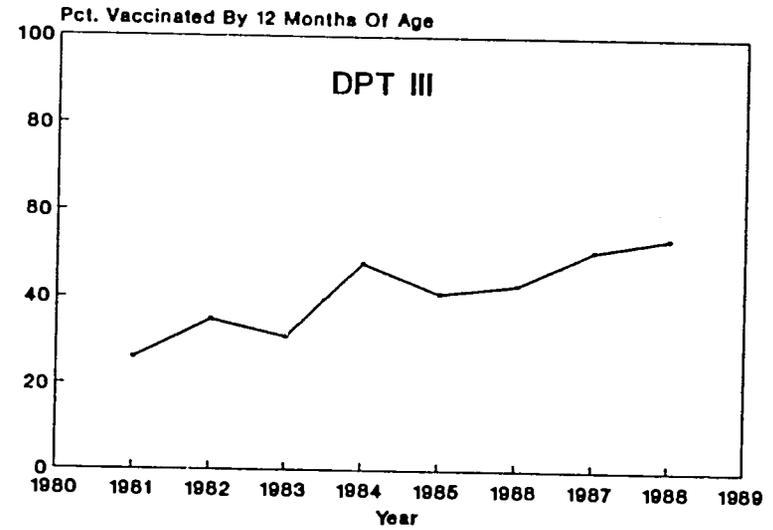
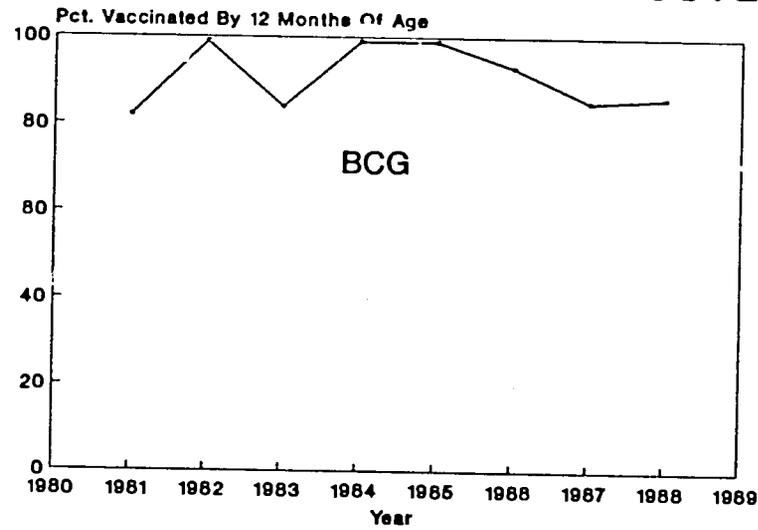


SOURCE: United Nations, 1988  
1) World Population Prospects, and  
2) Mortality of Children Under Age 5



SOURCE: World Health Organization, Annual Reports of the Programme for Control of Diarrhoeal Diseases

# VACCINATION COVERAGE RATES IN ECUADOR



SOURCE: WHO, Annual Reports of the EPI Programme

CIHI, ISTI; 3/90

## EL SALVADOR

## THE MOST CURRENT VALUES FOR SELECTED INDICATORS

<u>Demographic Indicators</u>	<u>Value</u>	<u>Year</u>	<u>Source</u>
Total Population	5,135,000	1989	A
Infant Mortality Rate	56/1000	1989	A
Life Expectancy At Birth	63 Yrs	1989	A
Children Under Age 1	179,000	1989	A
Annual Infant Deaths	10,000	1989	A
Total Fertility Rate	4.8	1989	A
<u>Child Survival Indicators</u>			
Immunization Coverage			
BCG	65%	1988	B
DPT III	61%	1988	B
Measles	63%	1988	B
Polio III	62%	1988	B
Tetanus II+	N/A		
Oral Rehydration Therapy			
ORS Access Rate	79%	1988	C
ORT Use Rate	45%	1988	C
Contraceptive Prevalence (Modern)	44%	1988	D
Adequate Nutritional Status	N/A		
Appropriate Infant Feeding	N/A		
a) Exclusive Breastfeeding	N/A		
b) Introduction Of Solids	N/A		
Median Duration Of Breastfeeding	N/A		

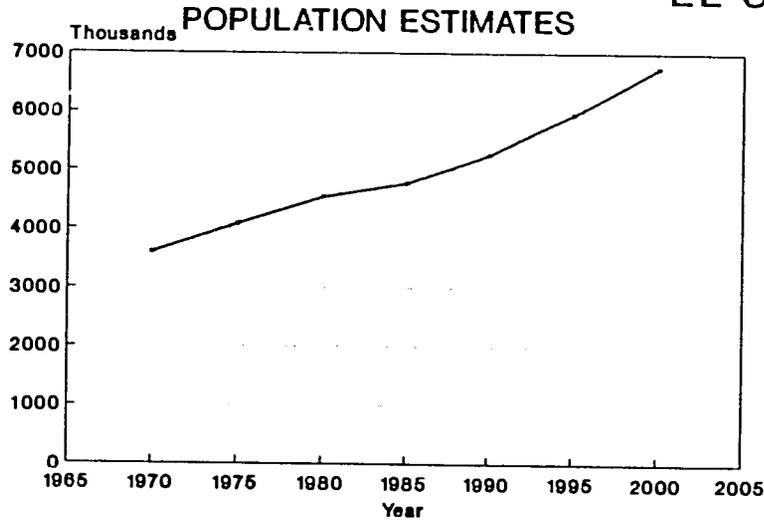
A World Population Prospects: 1988, prepared by the Estimates and Projections Section of the Population Division of the Department of International Economic and Social Affairs, United Nations.

B World Health Organization Expanded Programme on Immunization, Report WHO/EPI/CEIS/90.1, January, 1990.

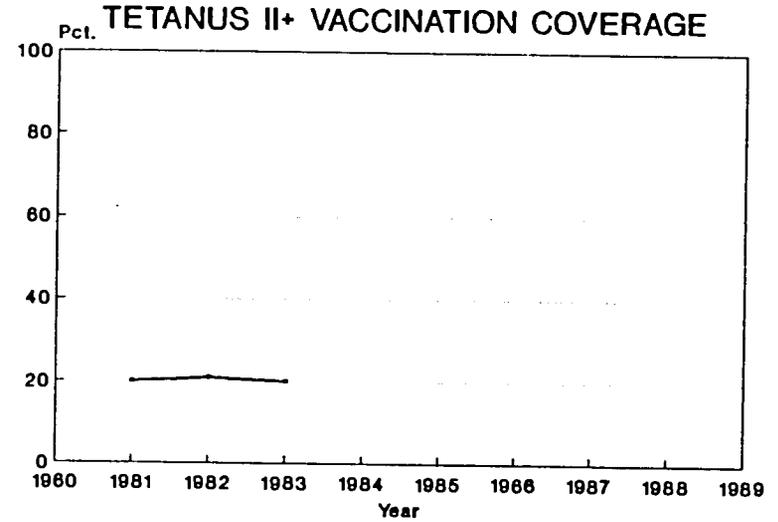
C World Health Organization, Diarrhoeal Disease Control Programme, Estimates of ORS Access and ORS/ORT Use Rates By Country and Region, 1988 (Table transmitted on facsimile dated 3/27/90).

D Encuesta Nacional De Salud Familiar: FESAL-88, Informe Preliminar, Asociacion Demografica Salvadoreña and Centros De Control De Enfermedades (CDC), September, 1988.

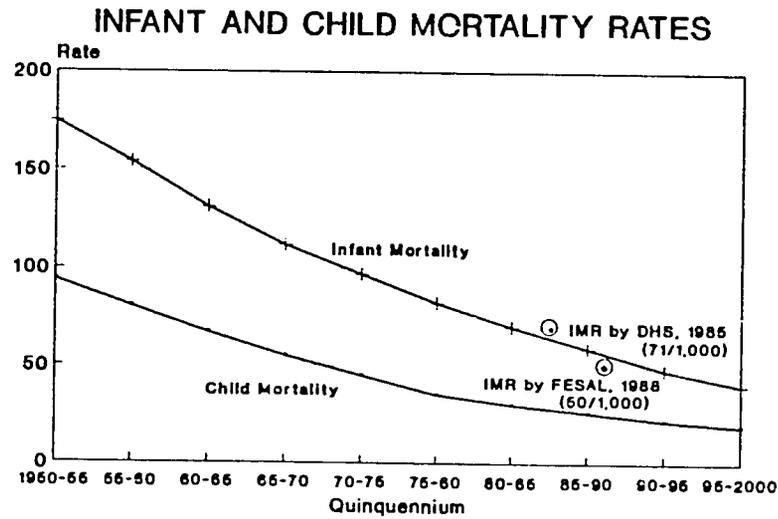
# EL SALVADOR



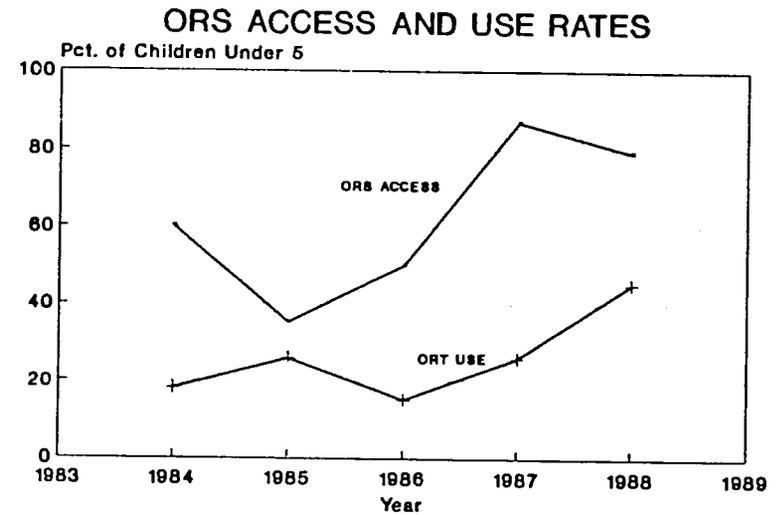
SOURCE: United Nations, World Population Prospects, 1988



SOURCE: World Health Organization, Annual Reports of the EPI Programme

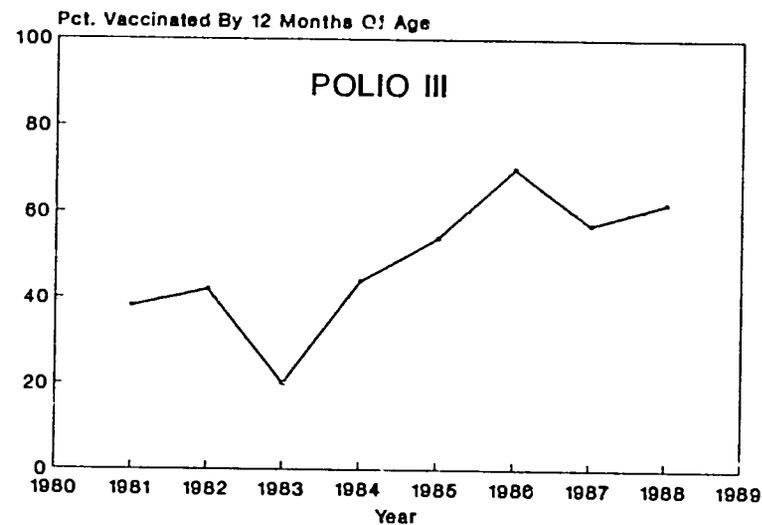
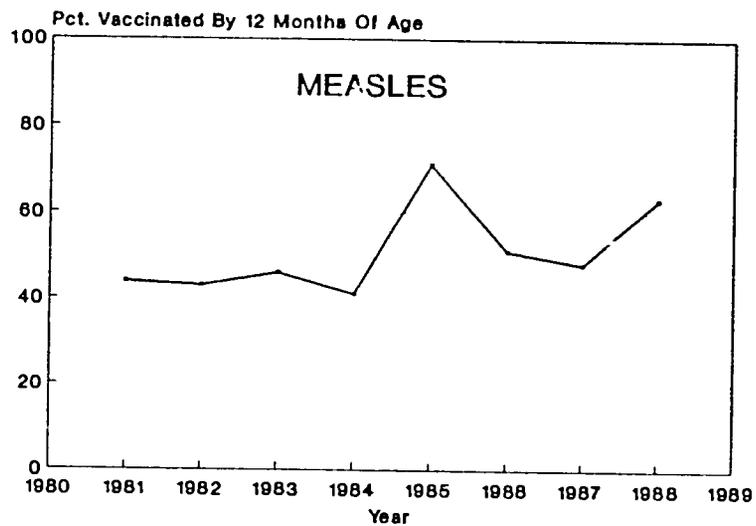
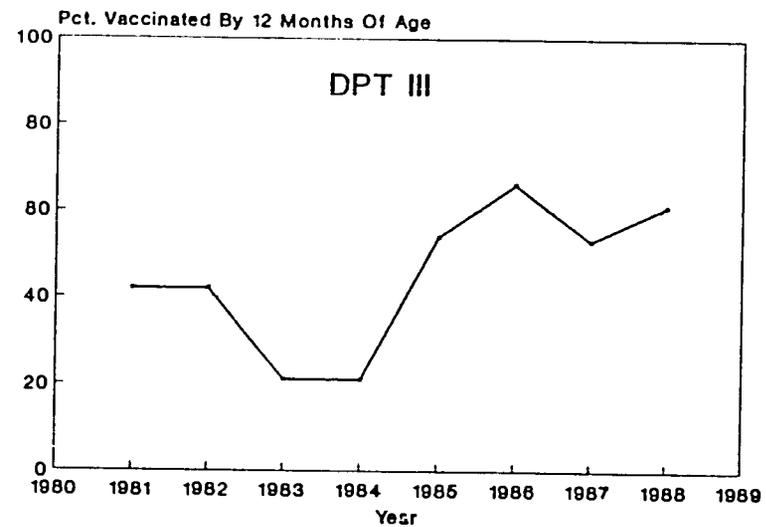
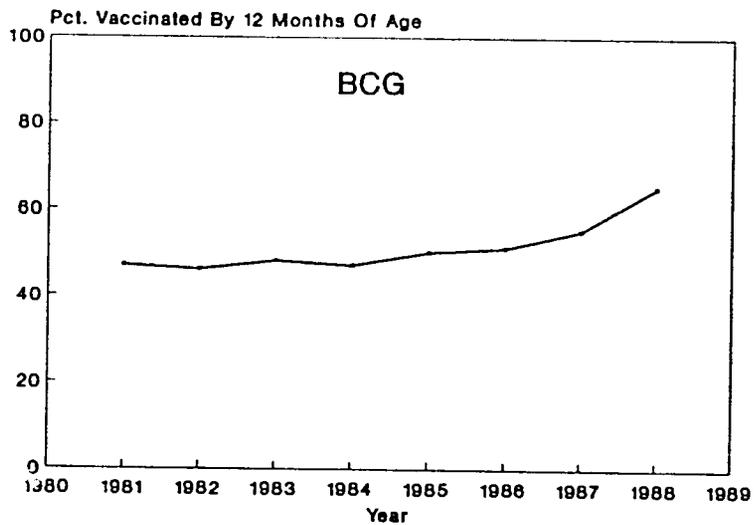


SOURCE: United Nations, 1988  
1) World Population Prospects, and  
2) Mortality of Children Under Age 5



SOURCE: World Health Organization, Annual Reports of the CDD Programme (1985 Use Rate: DHS, 1985)

## VACCINATION COVERAGE RATES IN EL SALVADOR



SOURCE: WHO, Annual Reports of the EPI Programme

CIHI, ISTI; 3/90

## GUATEMALA

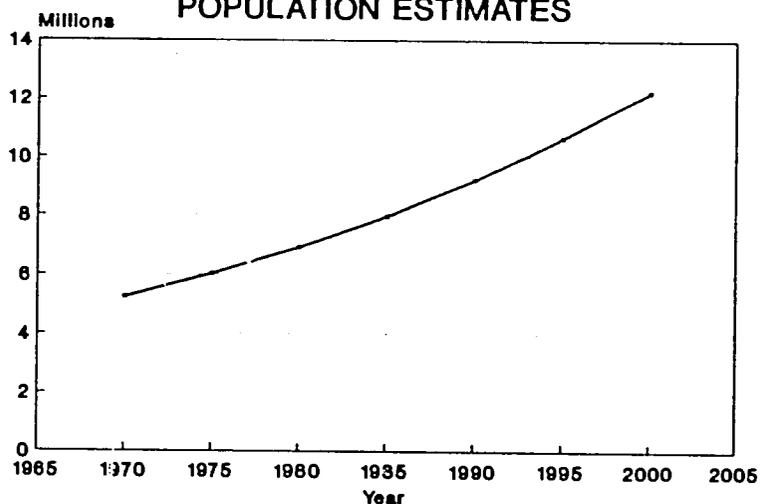
## THE MOST CURRENT VALUES FOR SELECTED INDICATORS

<u>Demographic Indicators</u>	<u>Value</u>	<u>Year</u>	<u>Source</u>
Total Population	8,935,000	1989	A
Infant Mortality Rate	73/1000	1987	D
Life Expectancy At Birth	63 Yrs	1989	A
Children Under Age 1	345,000	1989	A
Annual Infant Deaths	20,000	1989	A
Total Fertility Rate	5.6	1989	A
<u>Child Survival Indicators</u>			
Immunization Coverage			
BCG	38%	1988	B
DPT III	47%	1988	B
Measles	54%	1988	B
Polio III	55%	1988	B
Tetanus II+	12%	1987	B
Oral Rehydration Therapy			
ORS Access Rate	60.0%	1988	C
ORT Use Rate	15.9%	1987	D
Contraceptive Prevalence (Modern)	19%	1987	D
Adequate Nutritional Status	55%	1987	D
Appropriate Infant Feeding	N/A		
a) Exclusive Breastfeeding	N/A		
b) Introduction Of Solids	N/A		
Median Duration Of Breastfeeding	20.8 Mos	1987	D

- A World Population Prospects: 1988, prepared by the Estimates and Projections Section of the Population Division of the Department of International Economic and Social Affairs, United Nations.
- B World Health Organization Expanded Programme on Immunization, Report WHO/EPI/CEIS/90.1, January, 1990.
- C World Health Organization, Diarrhoeal Disease Control Programme, Estimates of ORS Access and ORS/ORT Use Rates By Country and Region, 1988 (Table transmitted on facsimile dated 3/27/90).
- D Encuesta Nacional de Salud Materno Infantil: 1987, Instituto de Nutrición de Centro América y Panamá and Demographic and Health Surveys, Institute for Resource Development/Westinghouse.

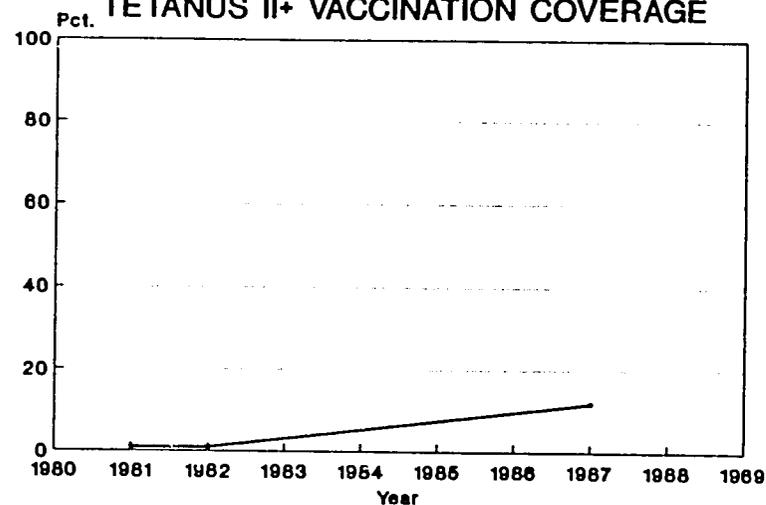
# GUATEMALA

## POPULATION ESTIMATES



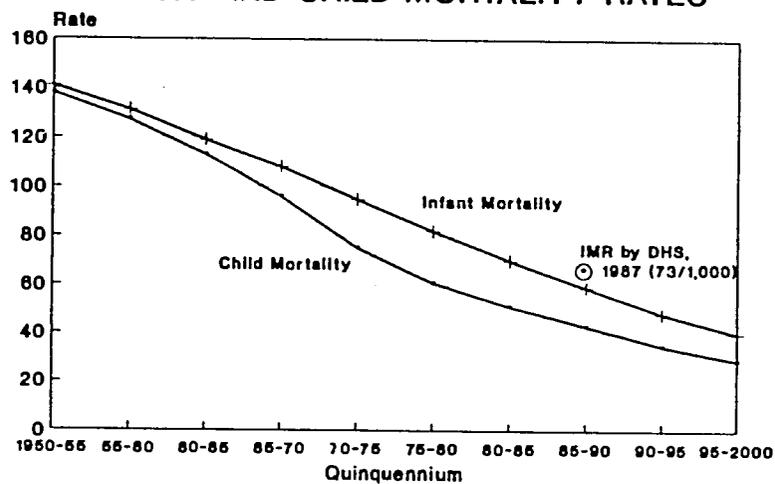
SOURCE: United Nations, World Population Prospects, 1988

## TETANUS II+ VACCINATION COVERAGE



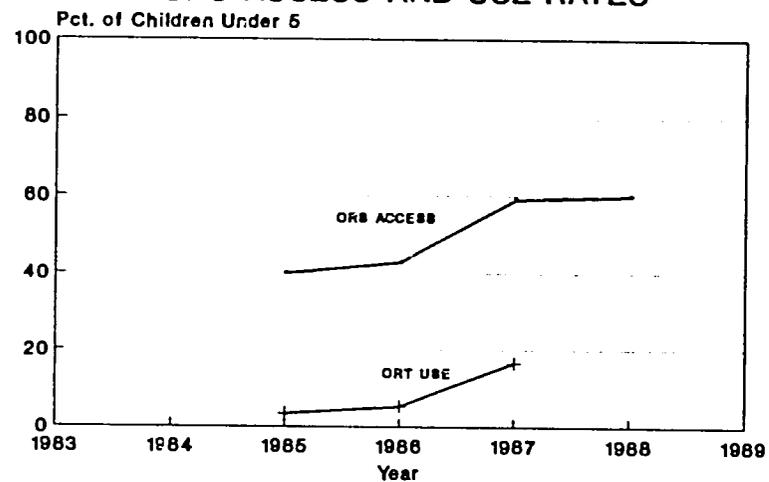
SOURCE: World Health Organization Annual Reports of the EPI Programme

## INFANT AND CHILD MORTALITY RATES



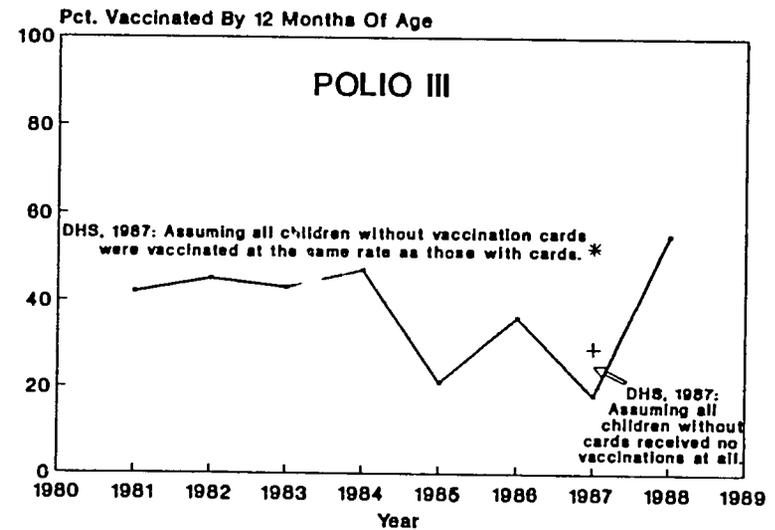
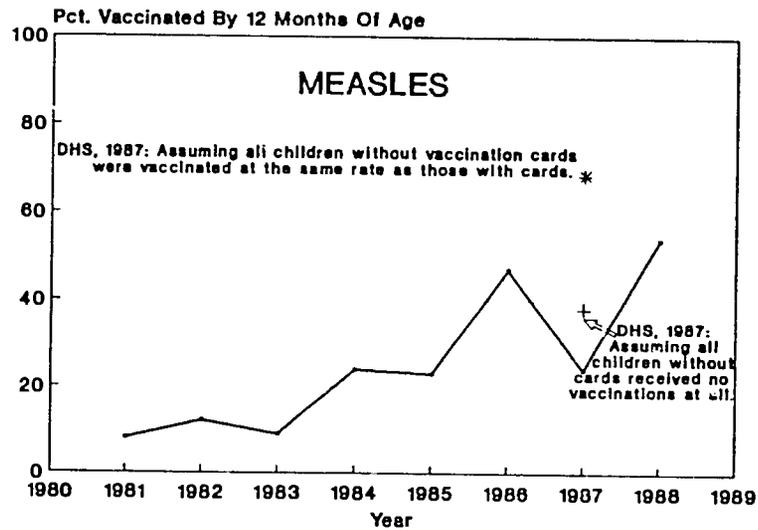
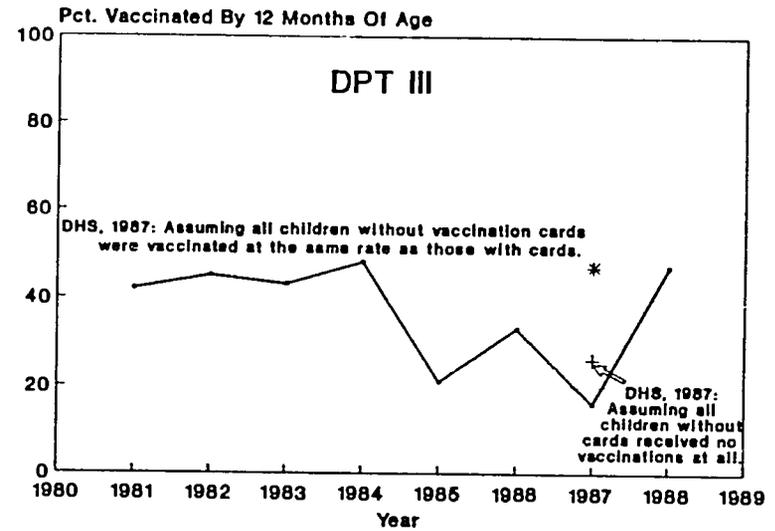
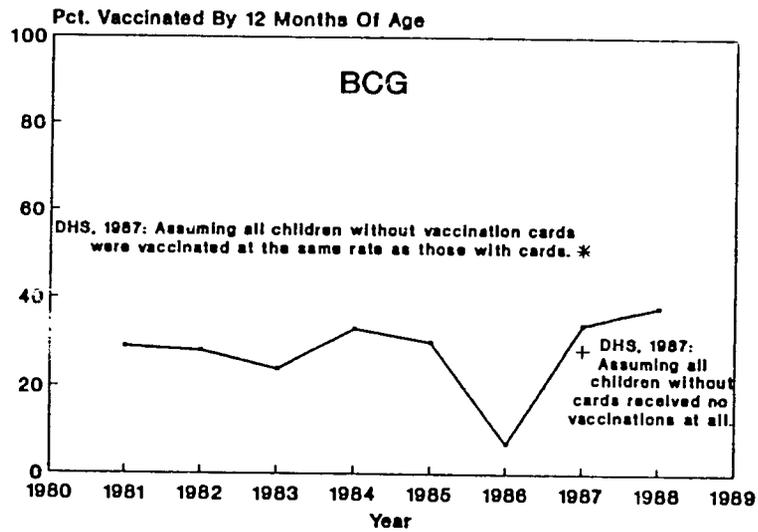
SOURCE: United Nations, 1988  
 1) World Population Prospects, and  
 2) Mortality of Children Under Age 5

## ORS ACCESS AND USE RATES



SOURCE: World Health Organization, Annual Reports of the CDD Programme (1987 Use Rate: DHS, 1987)

## VACCINATION COVERAGE RATES IN GUATEMALA



SOURCE: WHO, Annual Reports of the EPI Programme

CIHI, ISTI; 3/90

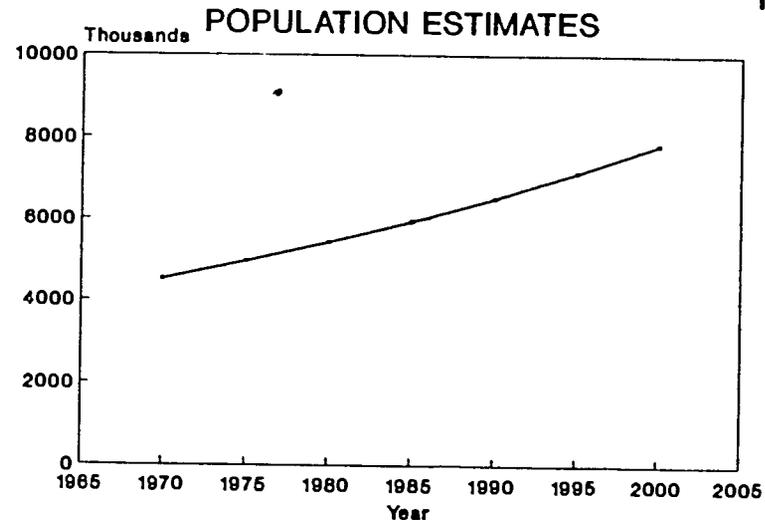
## HAITI

## THE MOST CURRENT VALUES FOR SELECTED INDICATORS

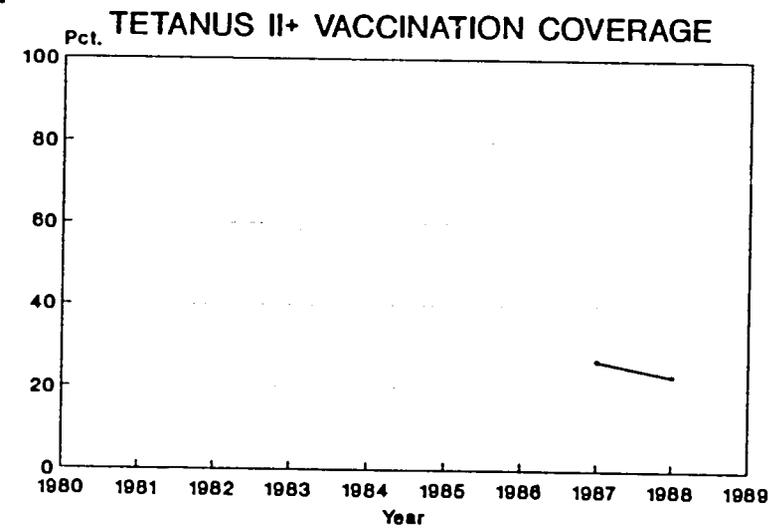
<u>Demographic Indicators</u>	<u>Value</u>	<u>Year</u>	<u>Source</u>
Total Population	6,382,000	1989	A
Infant Mortality Rate	114/1000	1989	A
Life Expectancy At Birth	55 Yrs	1989	A
Children Under Age 1	199,000	1989	A
Annual Infant Deaths	25,000	1989	A
Total Fertility Rate	4.6	1987	B
<u>Child Survival Indicators</u>			
Immunization Coverage			
BCG	45%	1988	C
DPT III	54%	1988	C
Measles	63%	1988	C
Polio III	54%	1988	C
Tetanus II+	23%	1988	C
Oral Rehydration Therapy			
ORS Access Rate	21%	1988	D
ORT Use Rate	35%	1988	D
Contraceptive Prevalence (Modern)	9.7%	1987	E
Adequate Nutritional Status	N/A		
Appropriate Infant Feeding	N/A		
a) Exclusive Breastfeeding	N/A		
b) Introduction Of Solids	N/A		
Median Duration Of Breastfeeding	N/A		

- A World Population Prospects: 1988, prepared by the Estimates and Projections Section of the Population Division of the Department of International Economic and Social Affairs, United Nations.
- B Cayemittes, Michel and Chahnazarian, Anouch, Survie et Santé De L'Enfant En Haiti, Institut Haïtien de L'Enfance, 1989.
- C World Health Organization Expanded Programme on Immunization, Report WHO/EPI/CEIS/90.1, January, 1990.
- D World Health Organization, Diarrhoeal Disease Control Programme, Estimates of ORS Access and ORS/ORT Use Rates By Country and Region, 1988 (Table transmitted on facsimile dated 3/27/90).
- E Enquête Nationale Haïtienne sur la Contraception (ENHAC): Résultats Préliminaires, Institut Haïtien de l'Enfance and Centers for Disease Control, Atlanta, 1990.

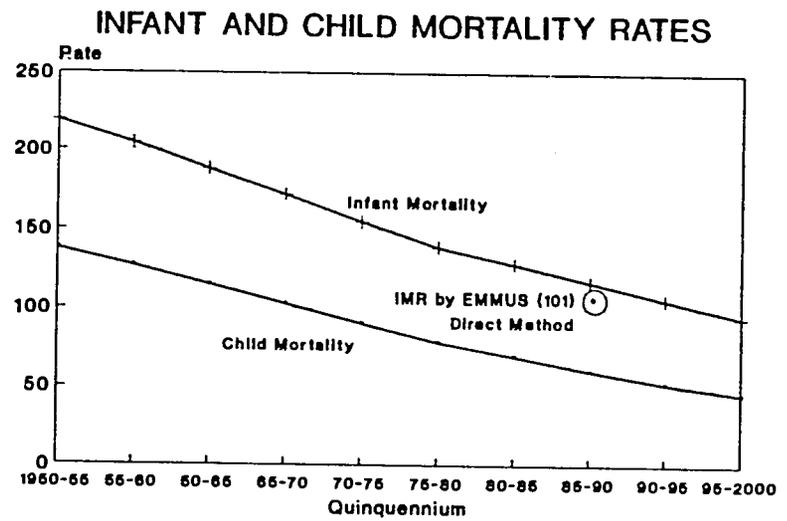
# HAITI



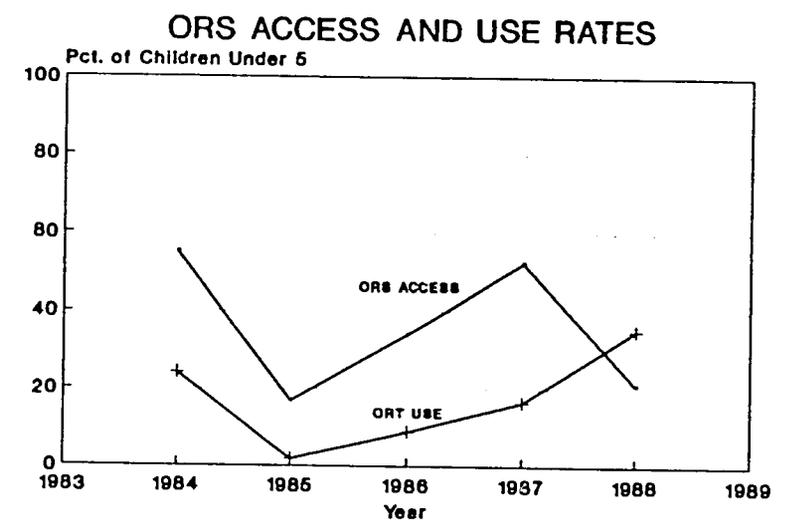
SOURCE: United Nations, World Population Prospects, 1988



SOURCE: WHO, Reports of the EPI Prog. (1987, EMMUS)

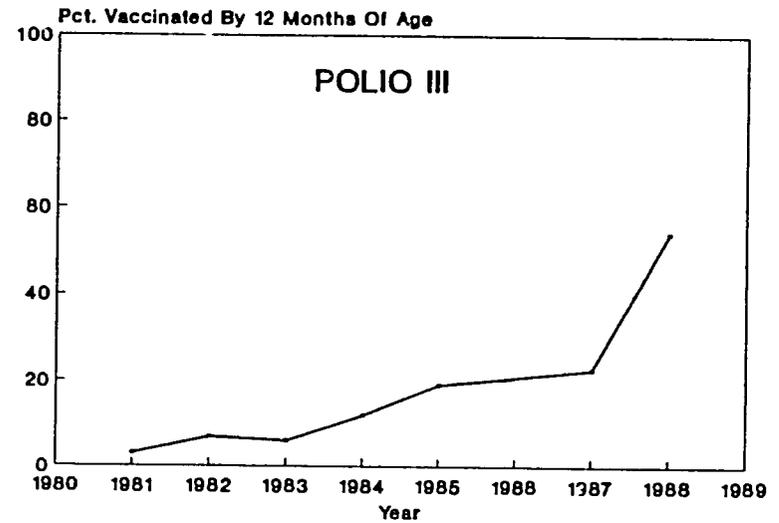
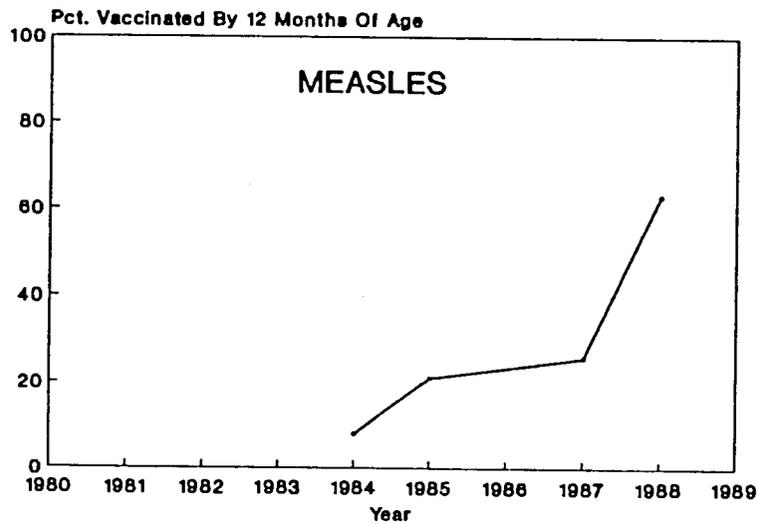
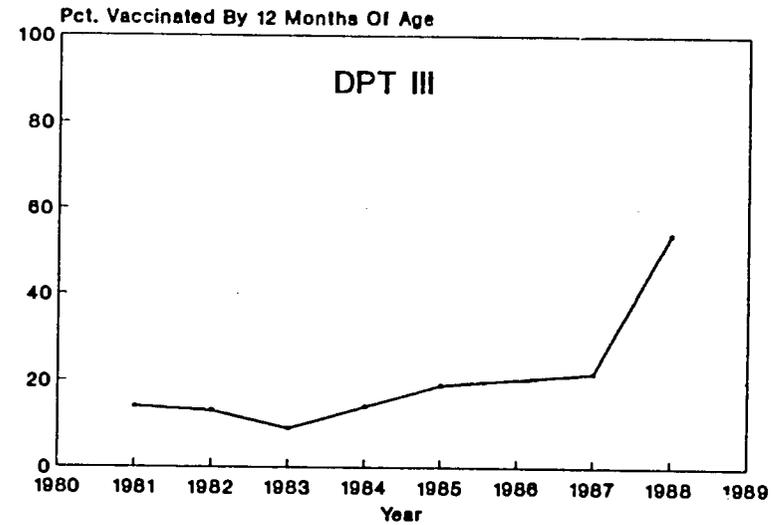
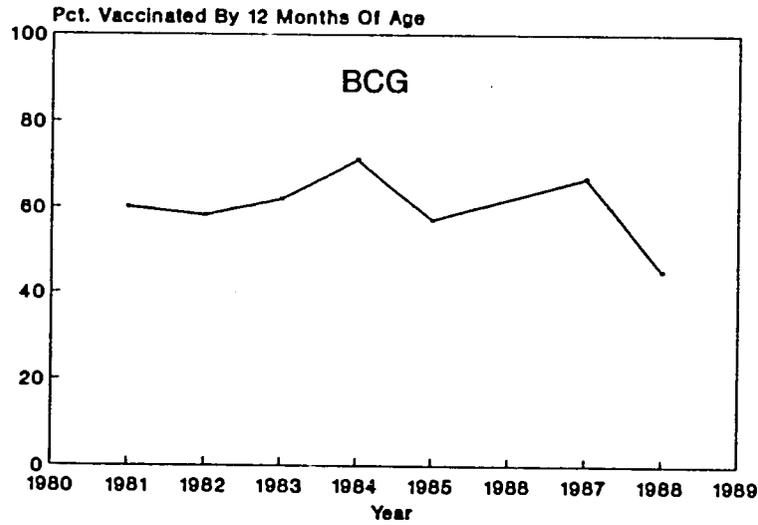


SOURCE: United Nations, 1988  
1) World Population Prospects, and  
2) Mortality of Children Under Age 5



SOURCE: World Health Organization, Annual Reports of the CDD Programme (1987 Use Rate: Also from EMMUS)

# VACCINATION COVERAGE RATES IN HAITI



SOURCE: WHO, Annual Reports, EPI Programme/1987, EMMUS

CIHI, ISTI; 3/90

## HONDURAS

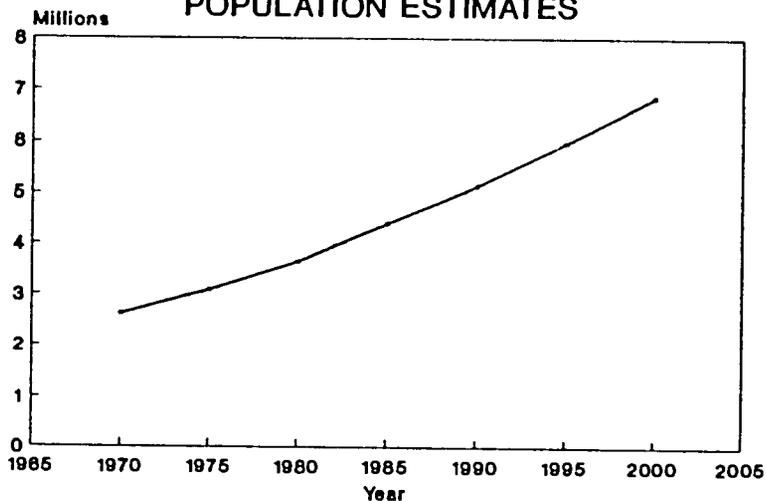
## THE MOST CURRENT VALUES FOR SELECTED INDICATORS

<u>Demographic Indicators</u>	<u>Value</u>	<u>Year</u>	<u>Source</u>
Total Population	4,376,839	1988	A
Infant Mortality Rate	61/1000	1987	B
Life Expectancy At Birth	62 Yrs	1987	B
Children Under Age 1	153,300	1988	A
Annual Infant Deaths	10,700	1988	C
Total Fertility Rate	5.6	1987	B
<u>Child Survival Indicators</u>			
<u>Immunization Coverage</u>			
BCG	85%	1988	D
DPT III	74%	1988	D
Measles	76%	1988	D
Polio III	70%	1988	D
Tetanus II+	46%	1987	D
<u>Oral Rehydration Therapy</u>			
ORS Access Rate	60%	1988	E
ORT Use Rate	66%	1988	E
Contraceptive Prevalence (Modern)	32.9%	1987	B
Adequate Nutritional Status	77%	1987	F
Appropriate Infant Feeding	N/A		
a) Exclusive Breastfeeding	N/A		
b) Introduction Of Solids	N/A		
Median Duration Of Breastfeeding	N/A		

- A National Census, 1988, Ministry of Planning, Coordination and Budget.
- B National Epidemiological and Health Survey, 1987, Science and Technology Unit, Ministry of Health.
- C Estimated by applying the Crude Birth Rate as given in World Population Prospects, 1988 to the Total Population to estimate births and multiplying by the Infant Mortality Rate.
- D World Health Organization Expanded Programme on Immunization, Report WHJ/EPI/CEIS/90.1, January, 1990.
- E World Health Organization, Diarrhoeal Disease Control Programme, Estimates of ORS Access and ORS/ORT Use Rates By Country and Region, 1988 (Table transmitted on facsimile dated 3/27/90).  
Note: The most recent empirical estimate of ORT Use is found in the National Epidemiological and Health Survey (B). That report cites a use rate for Litrosol, the name given to ORS packets in Honduras, of 17.5% and a use rate for herbal remedies, including various home solutions, of 18.2%.
- F National Nutrition Survey: 1987, as cited in A.I.D. Mission Cable/00525.

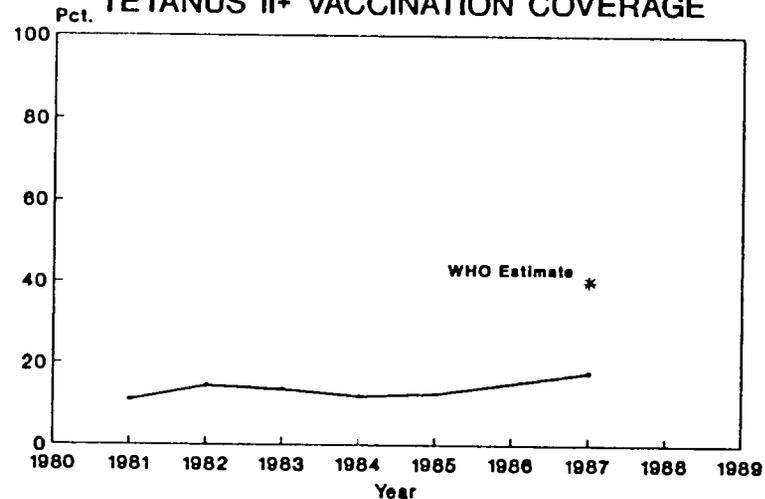
# HONDURAS

## POPULATION ESTIMATES



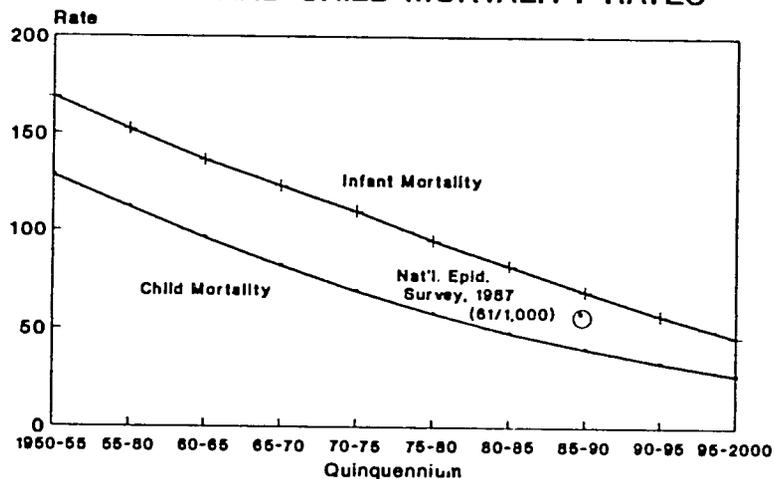
SOURCE: United Nations, World Population Prospects, 1988

## TETANUS II+ VACCINATION COVERAGE



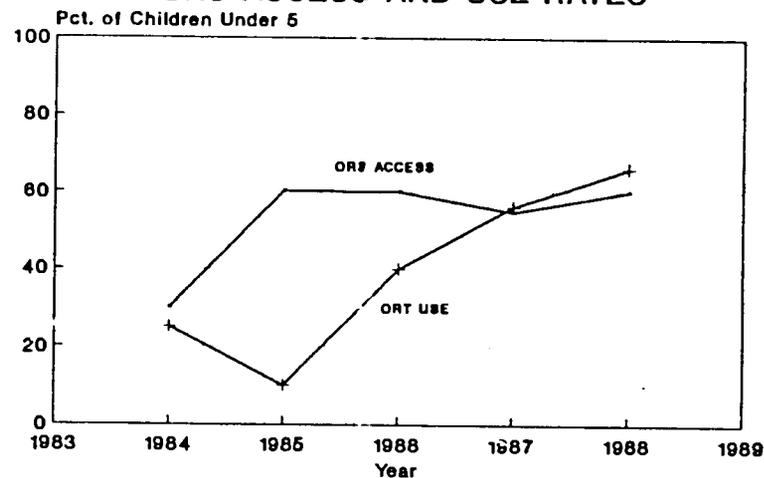
SOURCE: M.O.H as cited in forthcoming "Central America Initiative..Indicators"

## INFANT AND CHILD MORTALITY RATES



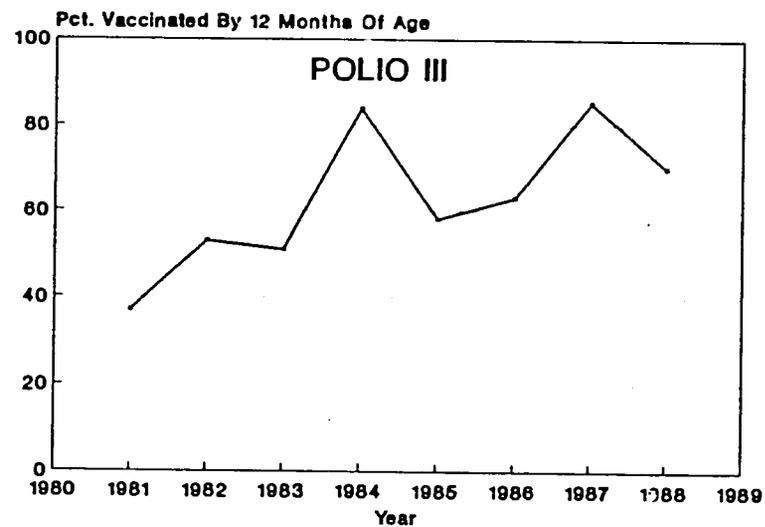
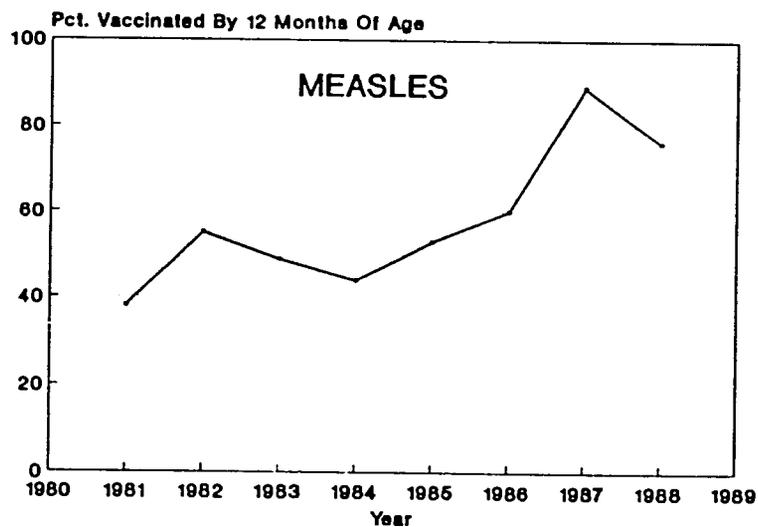
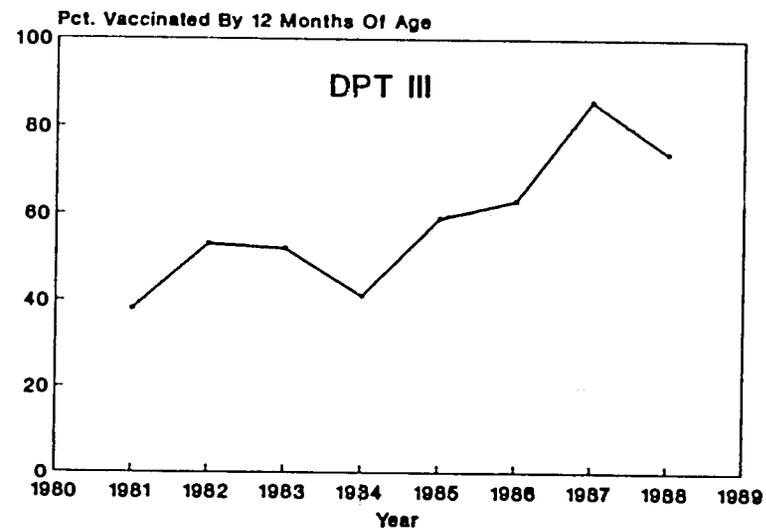
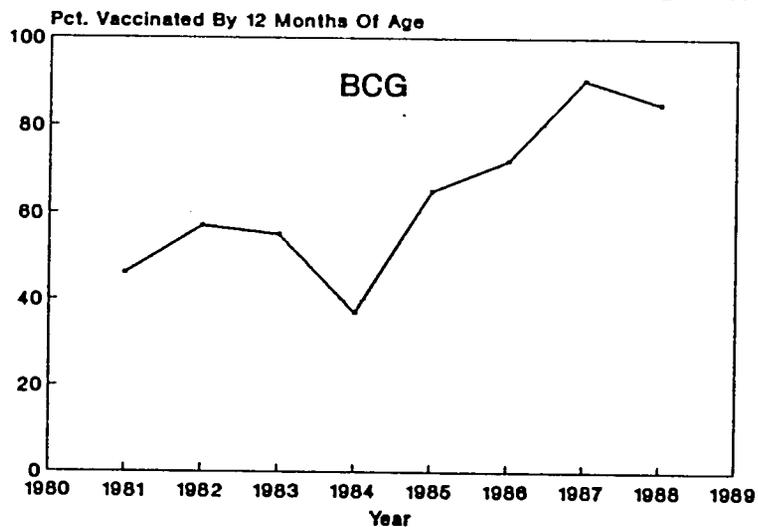
SOURCE: United Nations, 1988  
1) World Population Prospects, and  
2) Mortality of Children Under Age 5

## ORS ACCESS AND USE RATES



SOURCE: World Health Organization, Annual Reports of the Programme For the Control of Diarrheal Diseases

## VACCINATION COVERAGE RATES IN HONDURAS



SOURCE: WHO, EPI Reports / (1987: Nat'l Nut. Survey)

CIHI, ISTI; 3/90

## JAMAICA

## THE MOST CURRENT VALUES FOR SELECTED INDICATORS

<u>Demographic Indicators</u>	<u>Value</u>	<u>Year</u>	<u>Source</u>
Total Population	2,483,000	1989	A
Infant Mortality Rate	17/1000	1989	A
Life Expectancy At Birth	74 Yrs	1989	A
Children Under Age 1	61,000	1989	A
Annual Infant Deaths	1,000	1989	A
Total Fertility Rate	2.8	1989	A
<u>Child Survival Indicators</u>			
Immunization Coverage			
BCG	96%	1988	B
DPT III	82%	1988	B
Measles	68%	1988	B
Polio III	83%	1988	B
Tetanus II+	N/A		
Oral Rehydration Therapy			
ORS Access Rate	76%	1986	C
ORT Use Rate	15%	1986	C
Contraceptive Prevalence (Modern)	40%	1983	D
Adequate Nutritional Status	N/A		
Appropriate Infant Feeding	N/A		
a) Exclusive Breastfeeding	N/A		
b) Introduction Of Solids	N/A		
Median Duration Of Breastfeeding	N/A		

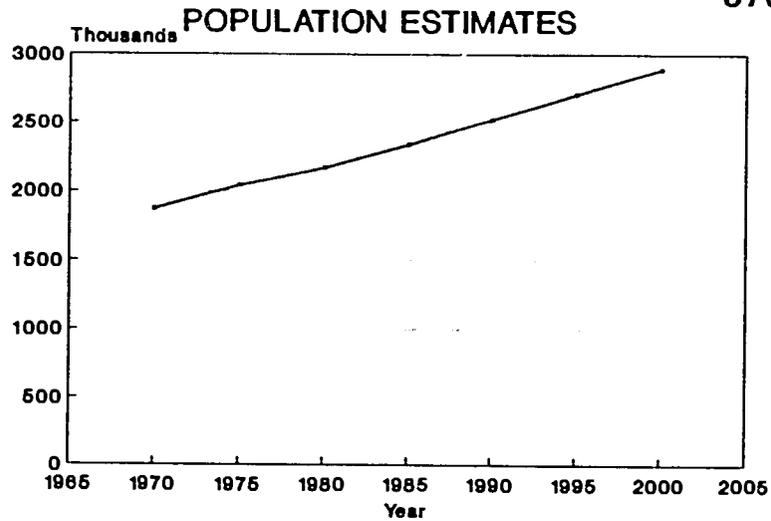
A World Population Prospects: 1988, prepared by the Estimates and Projections Section of the Population Division of the Department of International Economic and Social Affairs, United Nations. (According to 1988 statistics available in-country, the Total Population = 2,357,700 and the Total Fertility Rate = 2.5, as cited in the FY 1989 USAID Mission Response Form.)

B World Health Organization Expanded Programme on Immunization, Report WHO/EPI/CEIS/90.1, January, 1990.

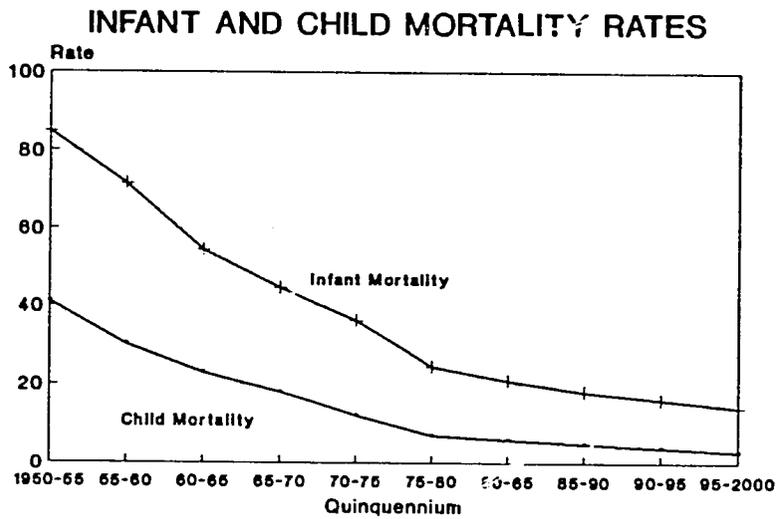
C World Health Organization, Diarrhoeal Disease Control Programme, Estimates of ORS Access and ORS/ORT Use Rates By Country and Region, 1988 (Table transmitted on facsimile dated 3/27/90).

D 1983 Contraceptive Prevalence Survey as cited in World Population Profile: 1989, U.S. Department of Commerce Bureau of the Census, September, 1989.

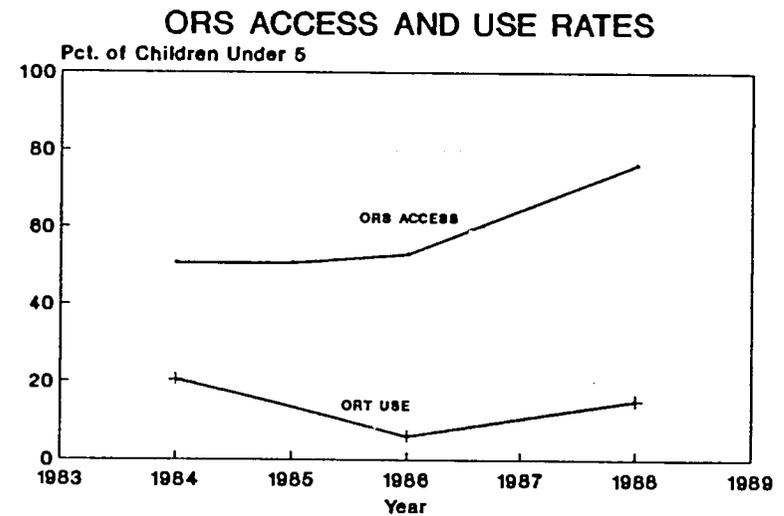
# JAMAICA



SOURCE: United Nations,  
World Population Prospects, 1988

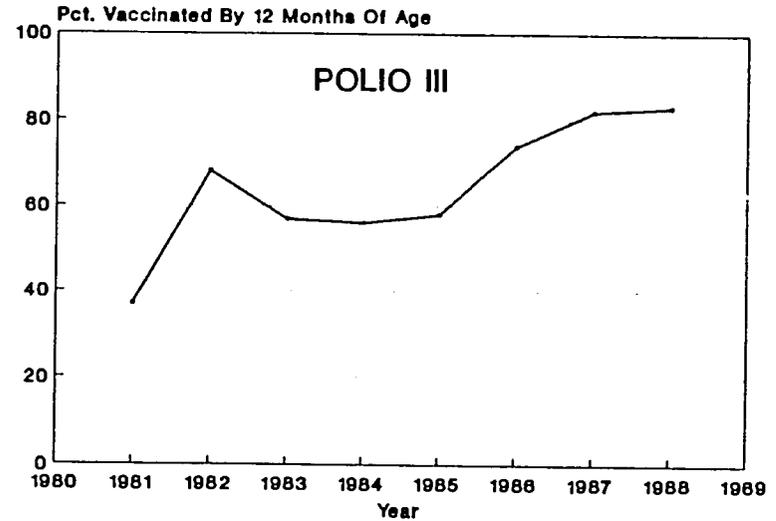
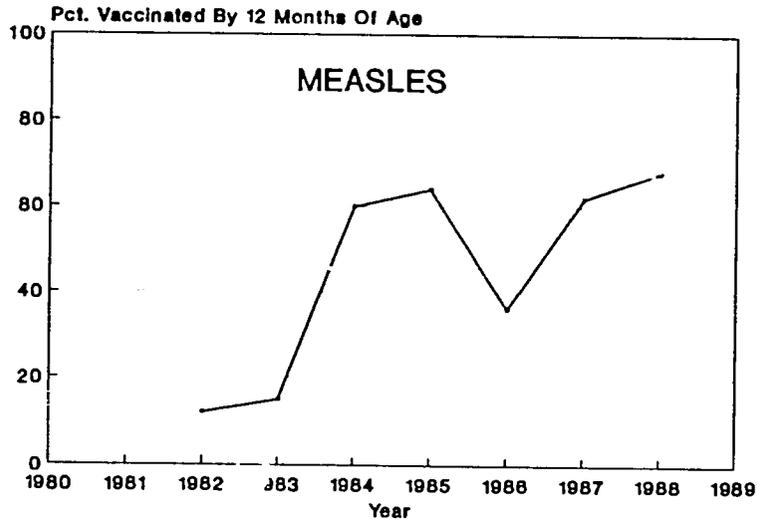
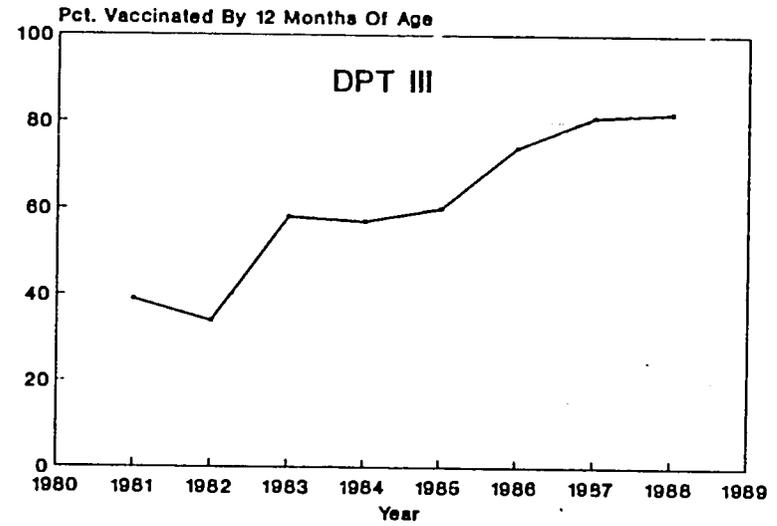
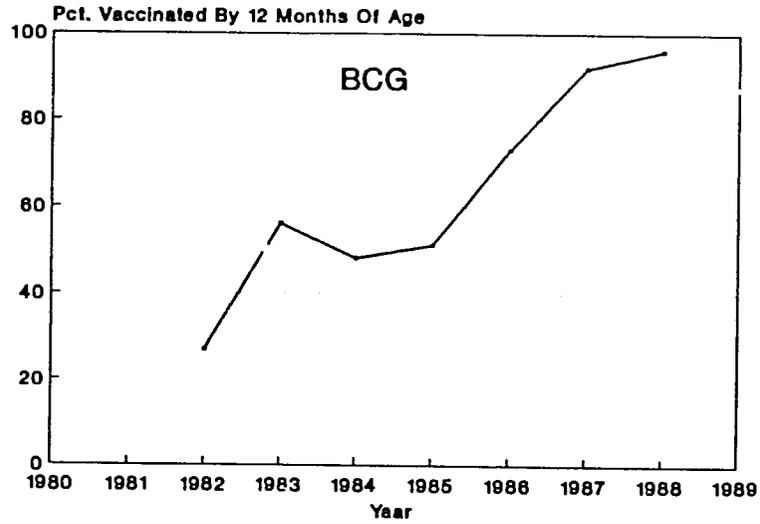


SOURCE: United Nations, 1988  
1) World Population Prospects, and  
2) Mortality of Children Under Age 5



SOURCE: World Health Organization,  
Annual Reports of the Programme for  
Control of Diarrhoeal Diseases

# VACCINATION COVERAGE RATES IN JAMAICA



SOURCE: WHO, Annual Reports of the EPI Programme

CIHI, ISTI; 3/90

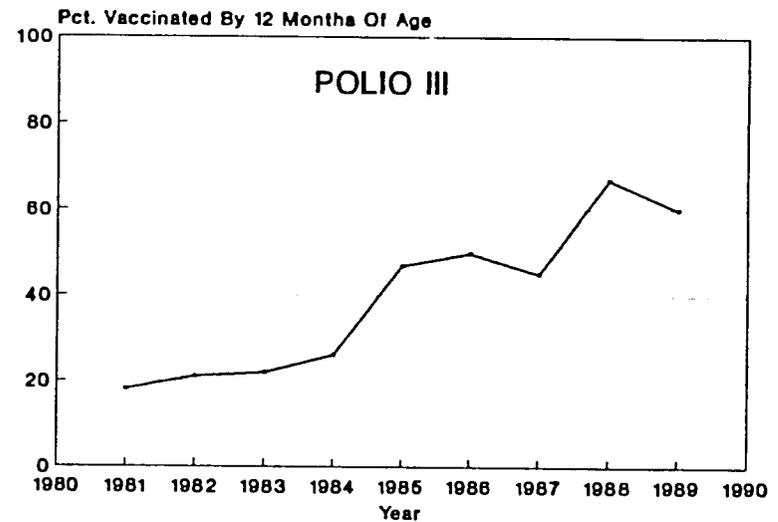
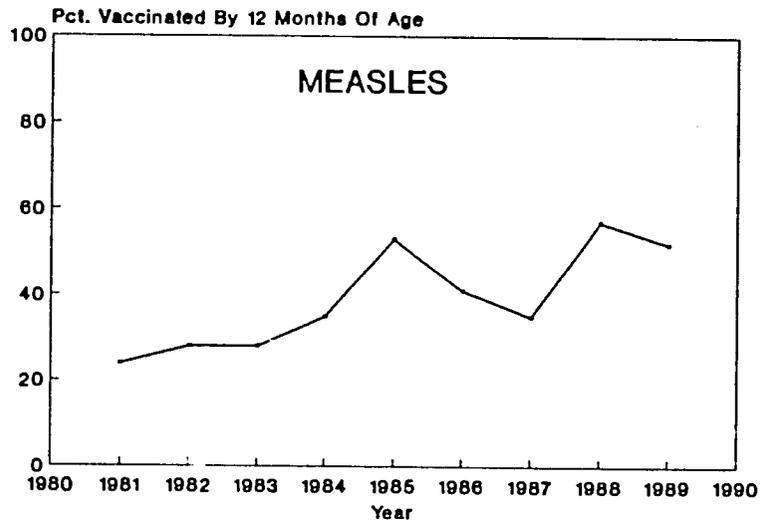
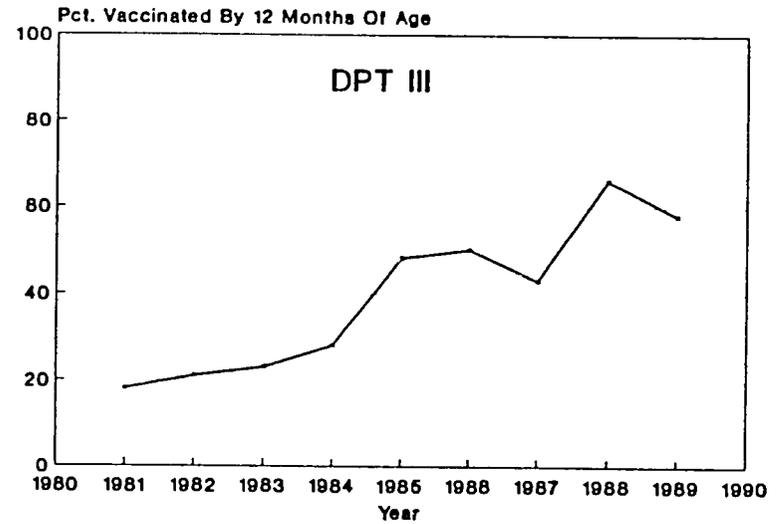
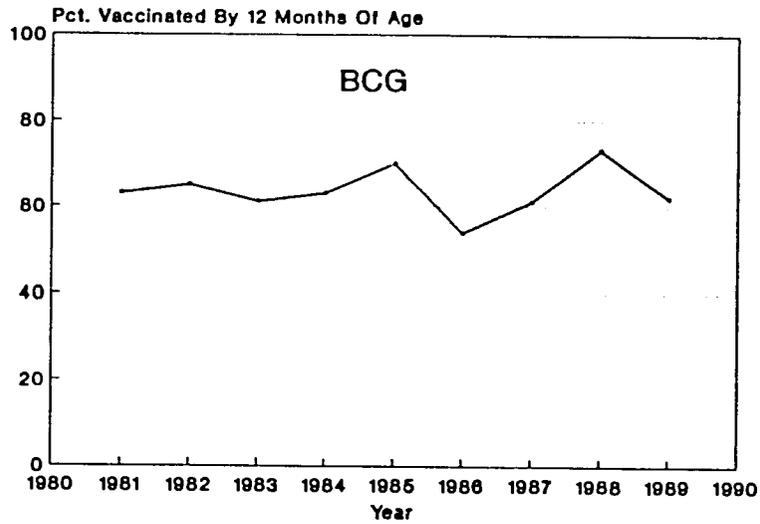
## PERU

## THE MOST CURRENT VALUES FOR SELECTED INDICATORS

<u>Demographic Indicators</u>	<u>Value</u>	<u>Year</u>	<u>Source</u>
Total Population	21,790,000	1989	A
Infant Mortality Rate	76/1000	1986	D
Life Expectancy At Birth	62 Yrs	1989	A
Children Under Age 1	684,000	1989	A
Annual Infant Deaths	61,000	1989	A
Total Fertility Rate	4.3	1989	A
<u>Child Survival Indicators</u>			
<u>Immunization Coverage</u>			
BCG	62%	1989	B
DPT III	58%	1989	B
Measles	52%	1989	B
Polio III	60%	1989	B
Tetanus II+	3%	1989	B
<u>Oral Rehydration Therapy</u>			
ORS Access Rate	23%	1988	C
ORT Use Rate	10%	1988	C
Contraceptive Prevalence (Modern)	23%	1986	D
Adequate Nutritional Status	78%	1984	E
Appropriate Infant Feeding	28%	1986	D
a) Exclusive Breastfeeding	31%		
b) Introduction Of Solids	24%		
Median Duration Of Breastfeeding	16.0 Mos	1986	D

- A World Population Prospects: 1988, prepared by the Estimates and Projections Section of the Population Division of the Department of International Economic and Social Affairs, United Nations.
- B Ministry of Health, Program Data for 1989 as cited in USAID Peru facsimile, 31-2700.
- C World Health Organization, Diarrhoeal Disease Control Programme, Estimates of ORS Access and ORS/ORT Use Rates By Country and Region, 1988 (Table transmitted on facsimile dated 3/27/90).
- D Encuesta Demográfica y de Salud Familiar (ENDES 1986), Demographic and Health Surveys, Institute for Resource Development/Westinghouse.
- E Encuesta Nacional de Nutrición y Salud (ENNSA), 1984.

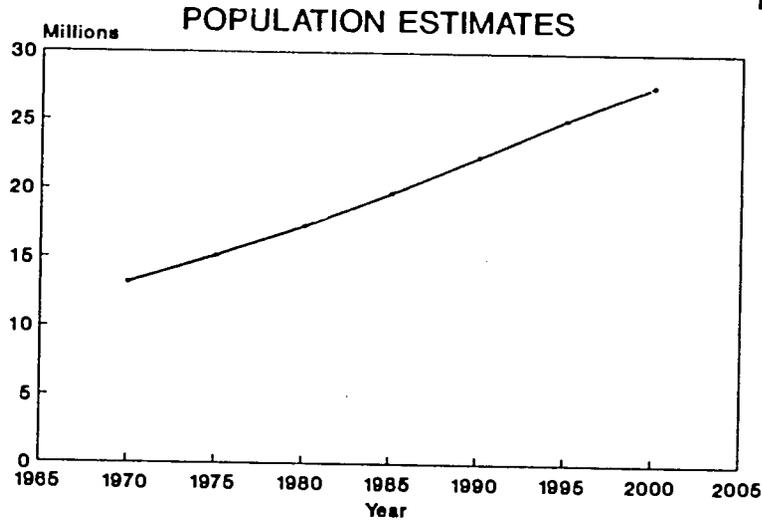
# VACCINATION COVERAGE RATES IN PERU



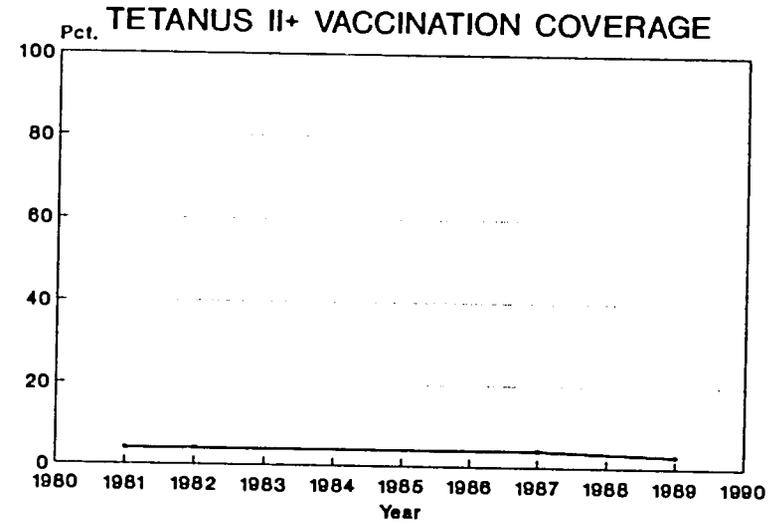
SOURCE: WHO, Annual EPI Reports/1989: MOH Program Data

CIHI, ISTI; 3/90

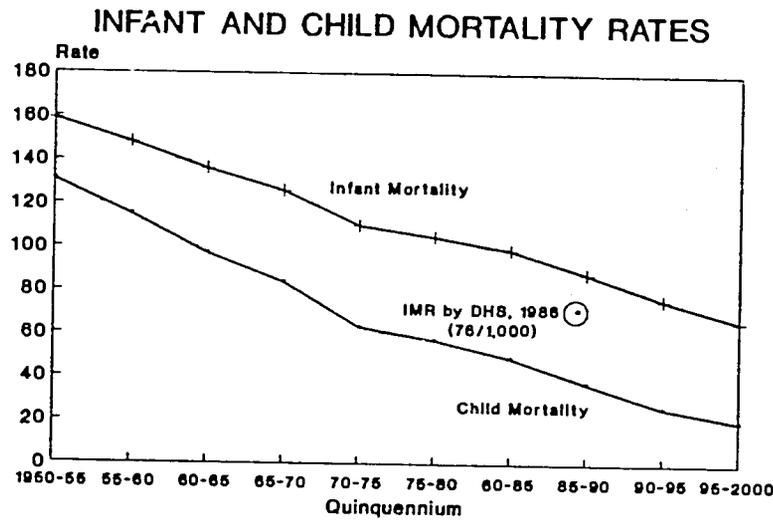
# PERU



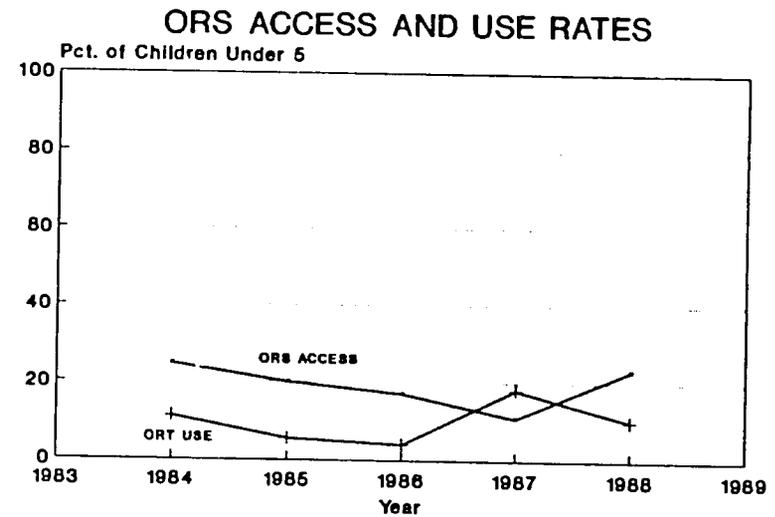
SOURCE: United Nations, World Population Prospects, 1988



SOURCE: WHO Annual EPI Reports (1989: Ministry of Health Program Data)



SOURCE: United Nations, 1988  
 1) World Population Prospects, and  
 2) Mortality of Children Under Age 5



SOURCE: World Health Organization, Annual Reports of the CDD Programme (1986 Use Rate, DHS)