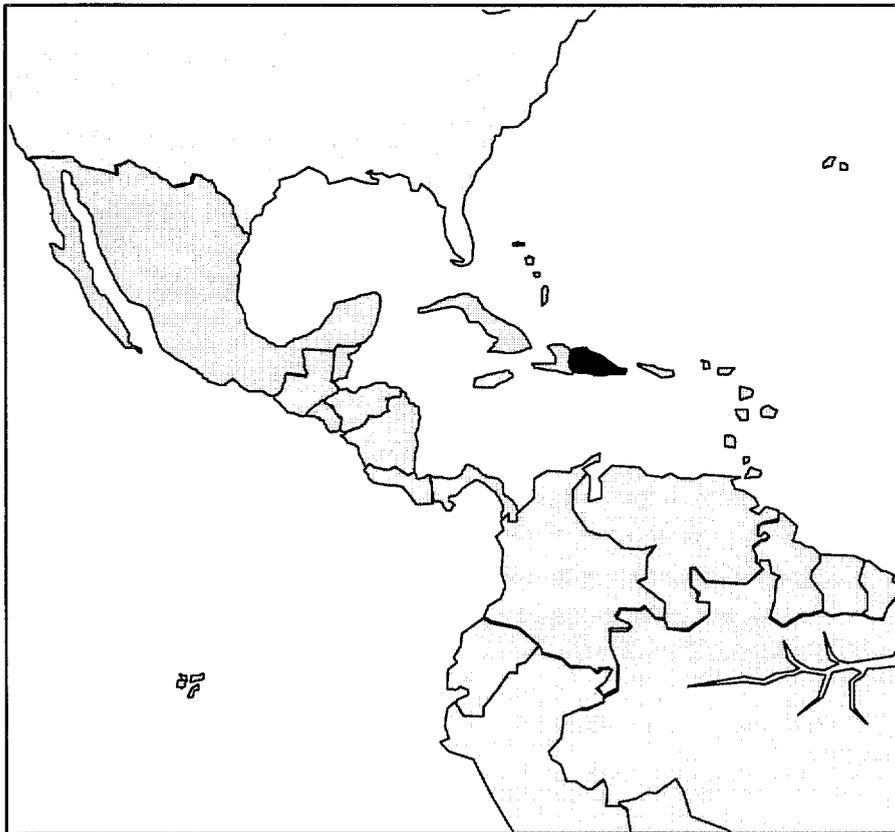


PN-ACC-625

CIHI Country Health Profile Series

DOMINICAN REPUBLIC

**Health Statistics Report
1996**



**Center for International Health Information
1601 N. Kent Street, Suite 1014
Arlington, VA 22209**

The Center for International Health Information (CIHI) is a project managed by Information Management Consultants, Inc. (IMC), with the International Science & Technology Institute (ISTI) and The Futures Group (FUTURES). CIHI prepared this document under the Data for Decision Making Project (936-5991.05), under contract number HRN-5991-C-00-3041-00 with the Office of Health and Nutrition, Center for Population, Health and Nutrition, Bureau for Global Programs, Field Support and Research, U.S. Agency for International Development (USAID).

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DOMINICAN REPUBLIC

Country Health Profile

This is part of a series of Country Health Profiles produced by the Center for International Health Information (CIHI). Each profile provides quantitative data on current health and demographic conditions in a developing country. Profile information is compiled from CIHI's databases and reference library and through research and analysis of other data sources.

CIHI's Country Health Profiles are intended to provide data in a concise format for individuals and organizations involved in health sector policy and decision-making. Contact CIHI at the address on the preceding page for information on the availability of country health profiles and health statistics reports, or look for these documents on the Internet at the following address: *www.cihi.com*.

In order to enable CIHI to report the most current health and demographic data, readers are encouraged to provide any more recent or more accurate information by contacting the center directly or through USAID's Office of Health and Nutrition.

EDITOR'S NOTES

1. Data Notes. For definitions of indicators and commentary regarding their derivation, the reader is referred to Section II.

2. References & Sources. Sources in this profile are referred to by a seven-digit code. Generally, the first three letters refer to a source institution, the following two numbers refer to the year of publication or transmittal, and the final two numbers uniquely identify the individual source. A complete list of sources appears in Section III.

3. Comparative Graphs and Tables. Unless otherwise specified, indicator values for country groupings are median values for the countries in each aggregate grouping for which data are available. Regional groupings include: (1) Sub-Saharan Africa, which includes the 47 countries comprising USAID's Africa Region; (2) No. Africa & Mideast, which corresponds to USAID's Near East Sub-region and includes 21 countries from Morocco in the West to Afghanistan in the East; (3) Asia, which corresponds to USAID's Asia Sub-region and includes 24 developing countries from Pakistan eastward; (4) Latin Am. & Carib. which includes 46 countries of Central and South America and the Caribbean and corresponds to USAID's Latin America and Caribbean region. Income groupings are based on the classifications used by the United Nations' Human Development Report 1995, which are defined as: (1) Low -Income Countries (GNP per capita = \$696 or less), (2) Middle-Income Countries (GNP/capita \$696-\$8,625); (3) High-Income Countries (GNP/capita >\$8,625). "Developing Countries" indicators are based on 107 countries which are not regarded as "Established Market Economies" by the World Bank's World Development Report 1994.

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I: HEALTH STATISTICS REPORT

Current Demographic and Health Indicators

Demographic Indicators			
INDICATOR	VALUE	YEAR	SOURCE
Total population (000s)	7,966	1995	BUC9401
Urban percent	65	1995	UNP9400
Women ages 15-49 (000s)	2,058	1995	CAL9602
Infant mortality rate	38	1995	WBK9302
Under 5 mortality rate	52	1995	JEE9507
Maternal mortality rate	110	1990	UNI9601
Life expectancy at birth	70	1995	UNP9400
Number of births (000s)	204	1995	CAL9603
Annual infant deaths (000s)	8	1995	CAL9604
Total fertility rate	3.3	1995	PRB9601

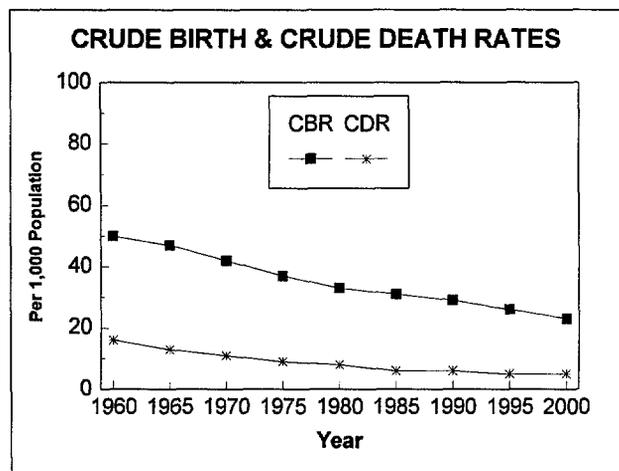
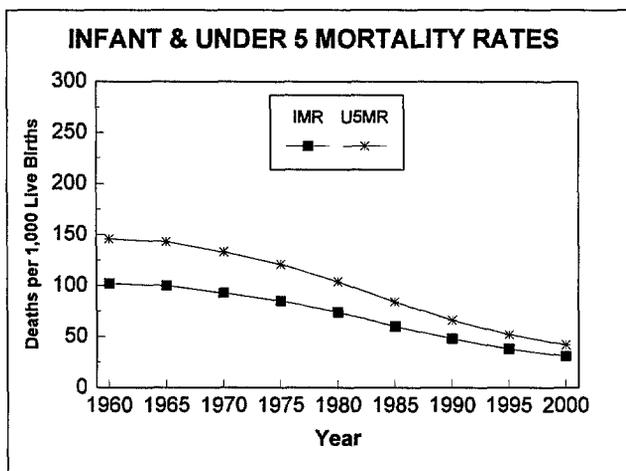
Child Survival Indicators			
INDICATOR	VALUE	YEAR	SOURCE
Vaccination Coverage (%)			
BCG	88	1995	WHE9601
DPT3	100	1995	WHE9601
Measles	100	1995	WHE9601
Polio 3	94	1995	WHE9601
TT2+	87	1995	WHE9601
DPT drop out rate	42	1991	DHS9111
Oral Rehydration Therapy (%)			
ORS access rate	13	1989	WHD9100
ORT use rate	32	1991	DHS9111
Contraceptive Prevalence (%)			
CPR, modern methods	52	1991	DHS9111
CPR, all methods	57	1991	DHS9111
Nutrition (%)			
Adequate nutritional status	86	1991	DHS9111
Exclusive breastfeeding	10	1991	DHS9111
Complementary feeding	23	1991	DHS9111
Continued breastfeeding	29	1991	DHS9111

Other Health Indicators			
INDICATOR	VALUE	YEAR	SOURCE
HIV Prevalence			
Adults (per 100,000)	987	1994	WHO9601
Access to Improved Water (%)			
Urban	82	1990	WHO9200
Rural	45	1990	WHO9200
Access to Sanitation (%)			
Urban	95	1990	WHO9200
Rural	75	1990	WHO9200
Delivery Conditions			
Deliveries by trained attendants (%)	92	1991	DHS9111

NA=Notavailable

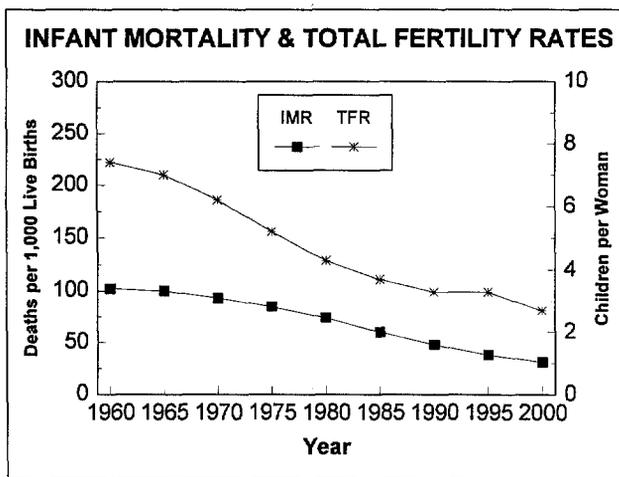
Trends in Selected Demographic and Health Indicators

INDICATOR	1960	1965	1970	1975	1980	1985	1990	1995	2000	SOURCE
Infant Mortality Rate	102	100	93	85	74	60	48	38	31	WBK9302
Under 5 Mortality Rate	146	143	133	121	104	84	66	52	42	JEE9507
Crude Birth Rate	50	47	42	37	33	31	29	26	23	UNP9400
Crude Death Rate	16	13	11	9	8	6	6	5	5	UNP9400
Avg Annual Growth	3.3	3.1	2.8	2.5	2.3	2.2	2.1	1.8	1.5	UNP9400
Total Fertility Rate	7.4	7.0	6.2	5.2	4.3	3.7	3.3	3.3	2.7	UNP9400



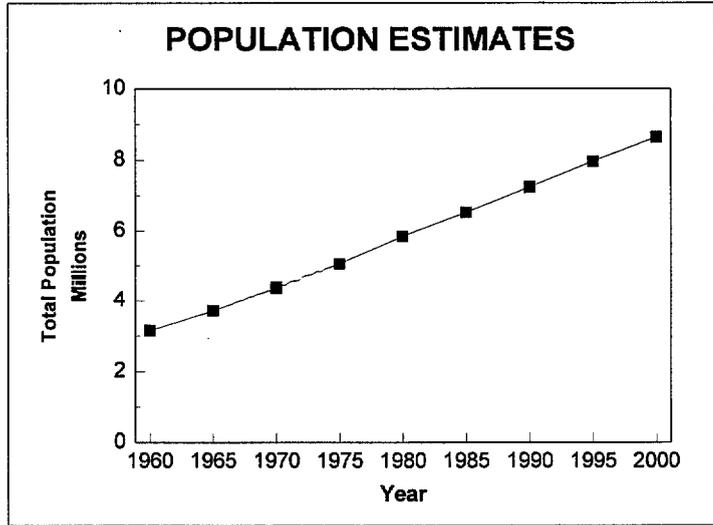
IMR and TFR

The relationship between IMR and TFR is currently a subject under review by the scientific community. While there is not conclusive evidence that the IMR and TFR are causally linked and necessarily decline together, there is empirical evidence for suspecting that such a reinforcing relationship exists as the pattern is observable in most countries.



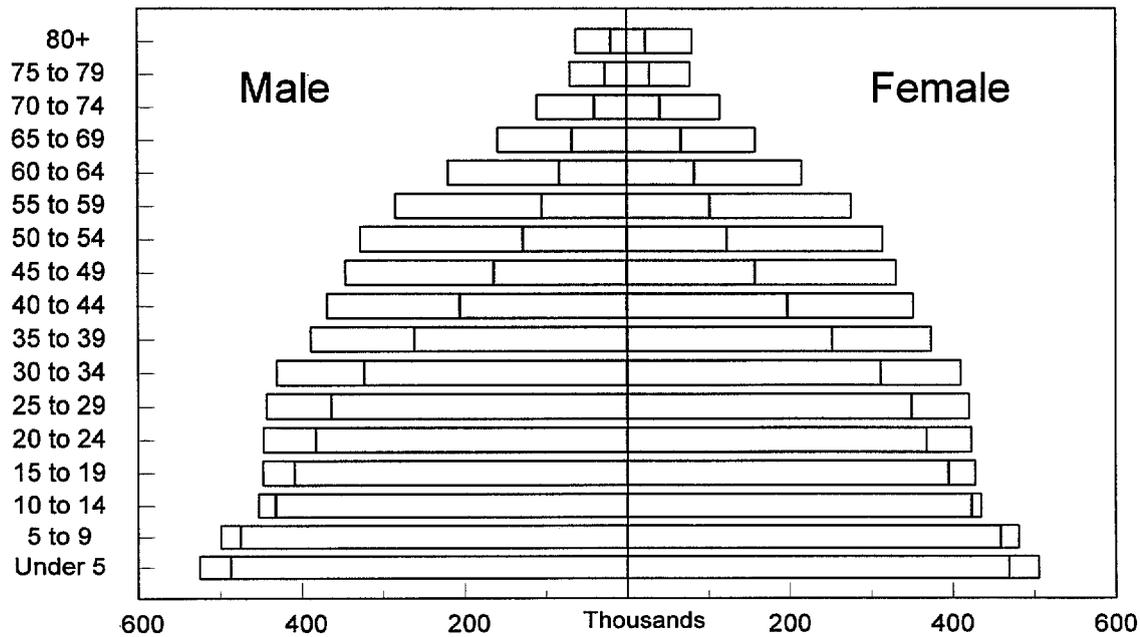
Population Estimates/Pyramid

POPULATION ESTIMATES		
YEAR	VALUE	SOURCE
1960	3,159,200	BUC9401
1965	3,713,946	BUC9401
1970	4,373,000	BUC9401
1975	5,052,053	BUC9401
1980	5,846,900	BUC9401
1985	6,532,530	BUC9401
1990	7,249,350	BUC9401
1995	7,966,040	BUC9401
2000	8,644,120	BUC9401



CURRENT & PROJECTED POPULATION

By Age & Sex: 1995 & 2020

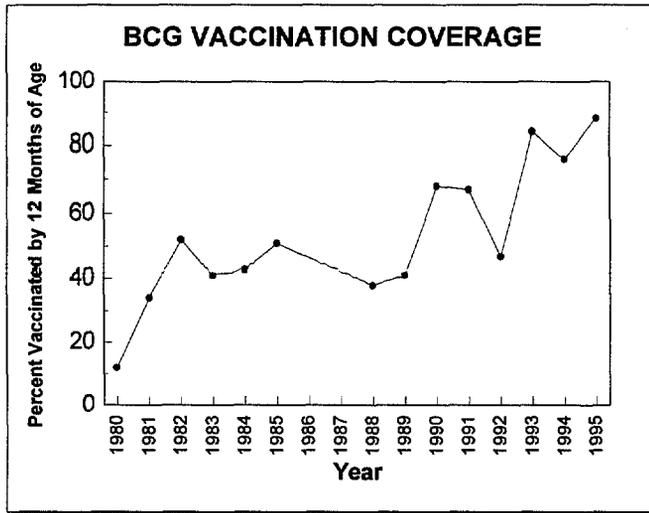


Source: UNP9400

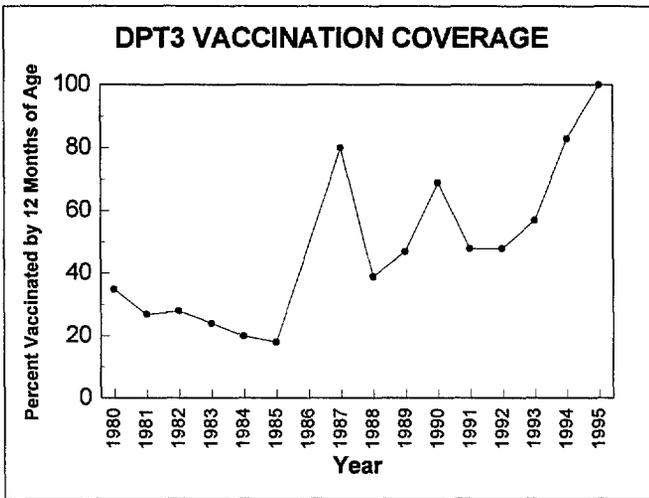
□ 1995 □ 2020

Trends in Selected Health and Child Survival Indicators

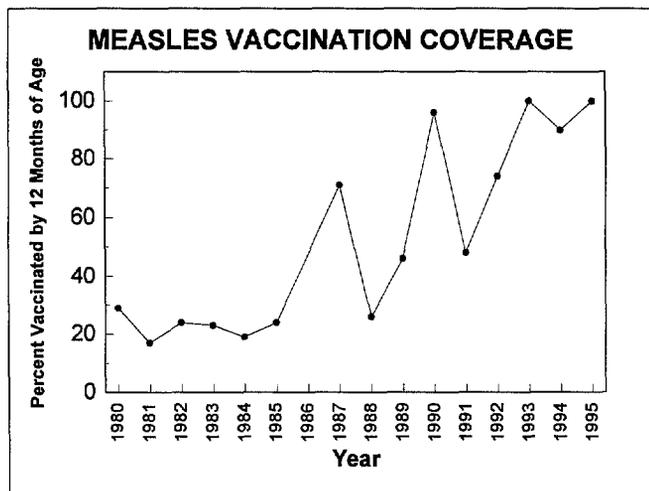
Vaccination Coverage Rates



BCG COVERAGE		
YEAR	PERCENT	SOURCE
1980	12	WHE8700
1981	34	WHE8700
1982	52	WHE8700
1983	41	WHE8900
1984	43	WHE8700
1985	51	WHE8700
1986	NA	
1987	NA	
1988	38	WHE8900
1989	41	WHE9001
1990	68	WHE9100
1991	67	DHS9111
1992	47	PAH9401
1993	84	WHE9403
1994	76	WHE9501
1995	88	WHE9601

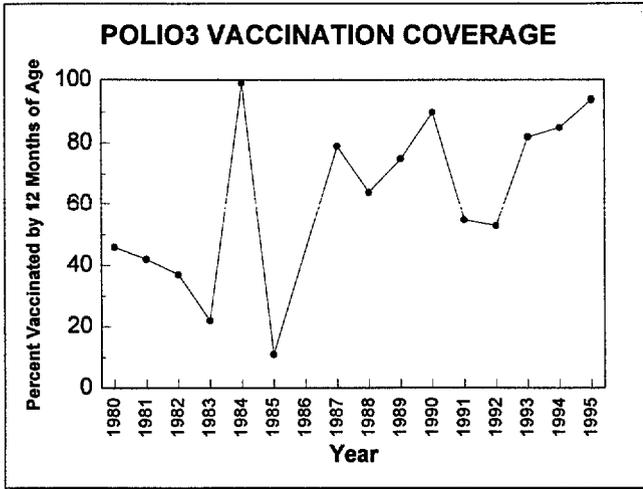


DPT3 COVERAGE		
YEAR	PERCENT	SOURCE
1980	35	WHE8700
1981	27	WHE8700
1982	28	WHE8700
1983	24	WHE8900
1984	20	WHE8700
1985	18	WHE8700
1986	NA	
1987	80	WHE8900
1988	39	WHE8900
1989	47	WHE9001
1990	69	WHE9100
1991	48	DHS9111
1992	48	PAH9401
1993	57	WHE9403
1994	83	WHE9501
1995	100	WHE9601

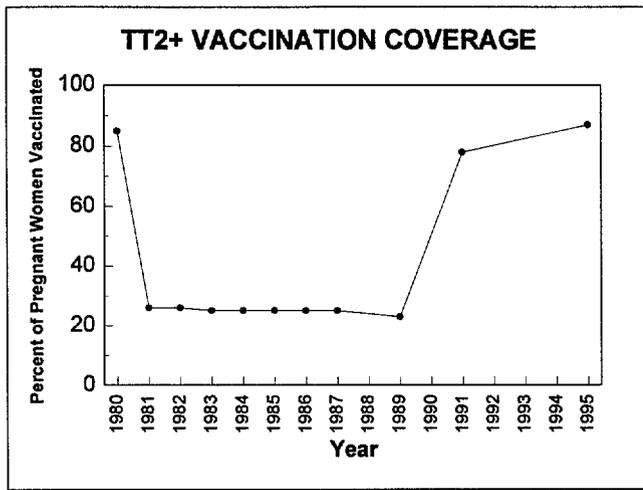


MEASLES COVERAGE		
YEAR	PERCENT	SOURCE
1980	29	WHE8700
1981	17	WHE8700
1982	24	WHE8700
1983	23	WHE8900
1984	19	WHE8700
1985	24	WHE8700
1986	NA	
1987	71	WHE8900
1988	26	WHE8900
1989	46	WHE9001
1990	96	WHE9100
1991	48	DHS9111
1992	74	PAH9401
1993	100	WHE9403
1994	90	WHE9501
1995	100	WHE9601

Vaccination Coverage Rates, continued

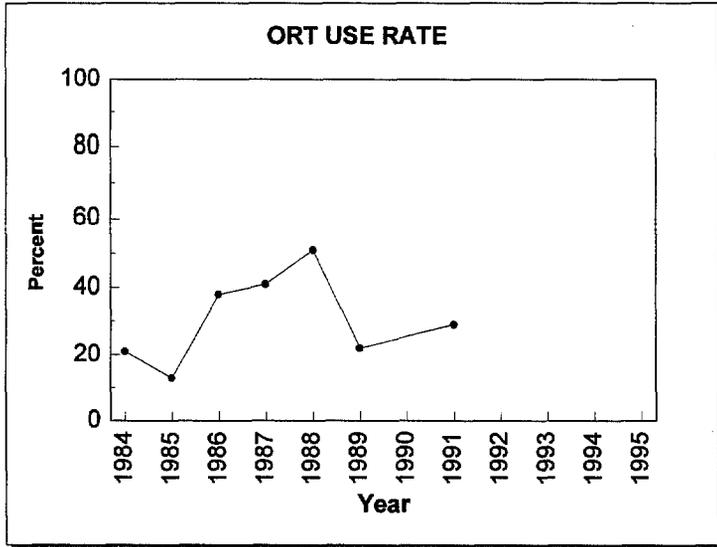


POLIO3 COVERAGE		
YEAR	PERCENT	SOURCE
1980	46	WHE8700
1981	42	WHE8700
1982	37	WHE8700
1983	22	WHE8900
1984	99	WHE8700
1985	11	WHE8801
1986	NA	
1987	79	WHE8900
1988	64	WHE8900
1989	75	WHE9001
1990	90	WHE9100
1991	55	DHS9111
1992	53	PAH9401
1993	82	WHE9403
1994	85	WHE9501
1995	94	WHE9601



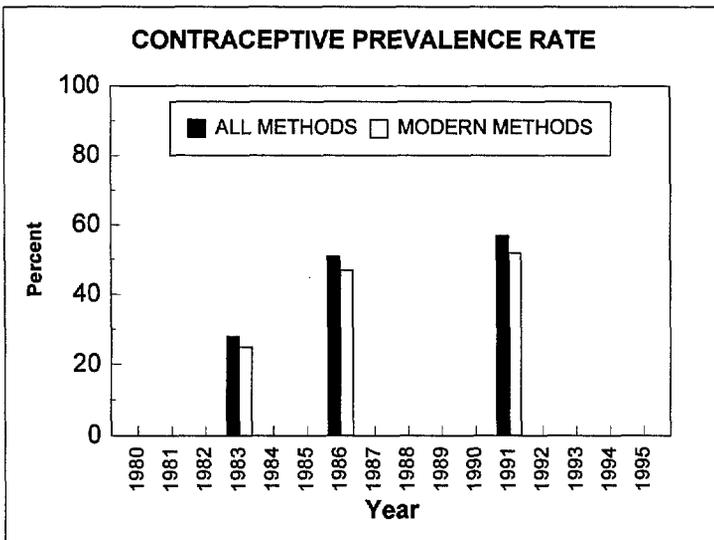
TT2+ COVERAGE		
YEAR	PERCENT	SOURCE
1980	85	WHE8700
1981	26	WHE8700
1982	26	WHE8700
1983	25	WHE8700
1984	25	WHE8700
1985	25	WHE8700
1986	25	WHE8800
1987	25	WHE8900
1988	NA	
1989	23	WHE9202
1990	NA	
1991	78	DHS9111
1992	NA	
1993	NA	
1994	NA	
1995	87	WHE9601

ORT Use Rate



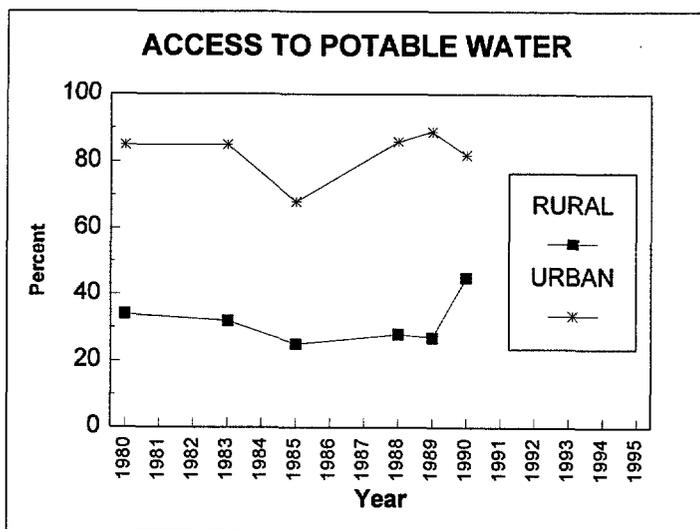
ORT USE RATE		
YEAR	PERCENT	SOURCE
1984	21	WHD8601
1985	13	WHD8700
1986	38	DHS8702
1987	41	WHD8900
1988	51	WHD9000
1989	22	WHD9100
1990	NA	
1991	29	DHS9111
1992	NA	
1993	NA	
1994	NA	
1995	NA	

Contraceptive Prevalence Rate



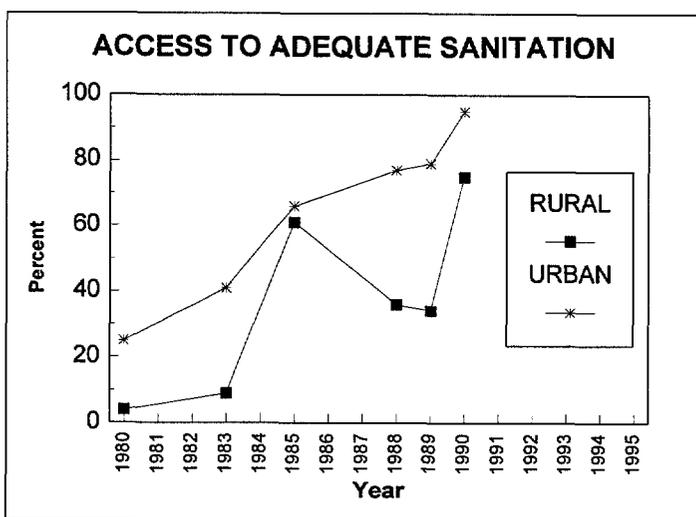
YEAR	ALL METHODS		MODERN METHODS	
	METHODS	SOURCE	METHODS	SOURCE
1980	NA		NA	
1981	NA		NA	
1982	NA		NA	
1983	28	BUC9401	25	BUC9401
1984	NA		NA	
1985	NA		NA	
1986	51	DHS8702	47	DHS8702
1987	NA		NA	
1988	NA		NA	
1989	NA		NA	
1990	NA		NA	
1991	57	DHS9111	52	DHS9111
1992	NA		NA	
1993	NA		NA	
1994	NA		NA	
1995	NA		NA	

Access to Potable Water



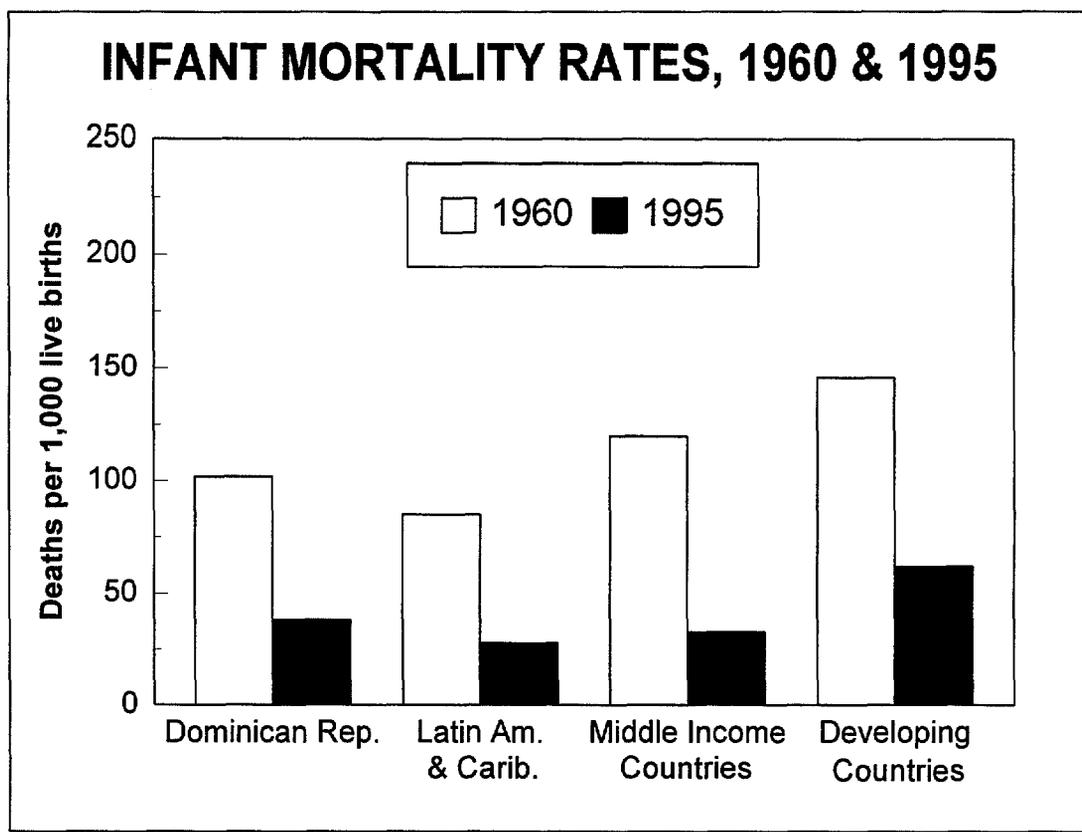
YEAR	RURAL SOURCE	URBAN SOURCE
1980	34 WHO9101	85 WHO9101
1981	NA	NA
1982	NA	NA
1983	32 WHO9101	85 WHO9101
1984	NA	NA
1985	25 AID9201	68 AID9201
1986	NA	NA
1987	NA	NA
1988	28 WHO9101	86 WHO9101
1989	27 AID9201	89 AID9201
1990	45 WHO9200	82 WHO9200
1991	NA	NA
1992	NA	NA
1993	NA	NA
1994	NA	NA
1995	NA	NA

Access to Adequate Sanitation



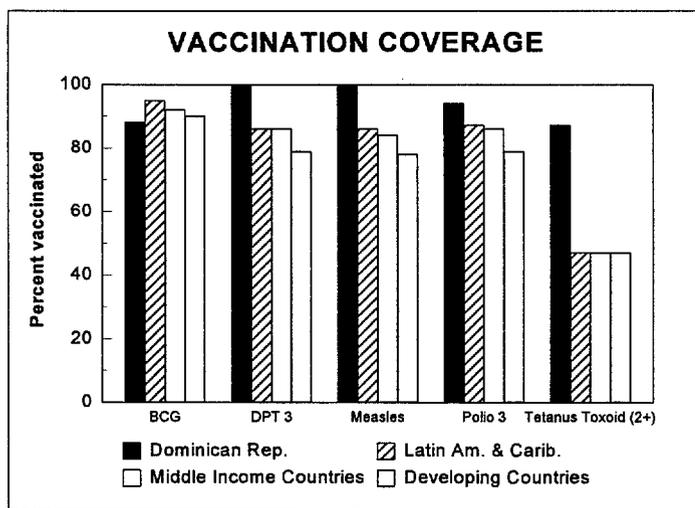
YEAR	RURAL SOURCE	URBAN SOURCE
1980	4 WHO9101	25 WHO9101
1981	NA	NA
1982	NA	NA
1983	9 WHO9101	41 WHO9101
1984	NA	NA
1985	61 AID9201	66 AID9201
1986	NA	NA
1987	NA	NA
1988	36 WHO9101	77 WHO9101
1989	34 AID9201	79 AID9201
1990	75 WHO9200	95 WHO9200
1991	NA	NA
1992	NA	NA
1993	NA	NA
1994	NA	NA
1995	NA	NA

COMPARATIVE INDICATORS
Comparative Infant Mortality Rates



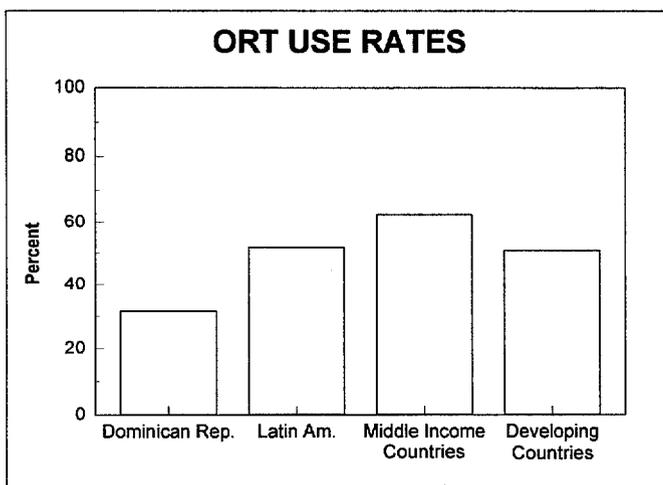
YEAR	1960	1995	Source
Dominican Rep.	102	38	WBK9302
<i>Median values for country groupings:</i>			
Latin Am. & Carib.	85	28	CAL9606
Middle Income Countries	120	33	CAL9606
Developing Countries	146	62	CAL9606

Comparative Vaccination Coverage Rates



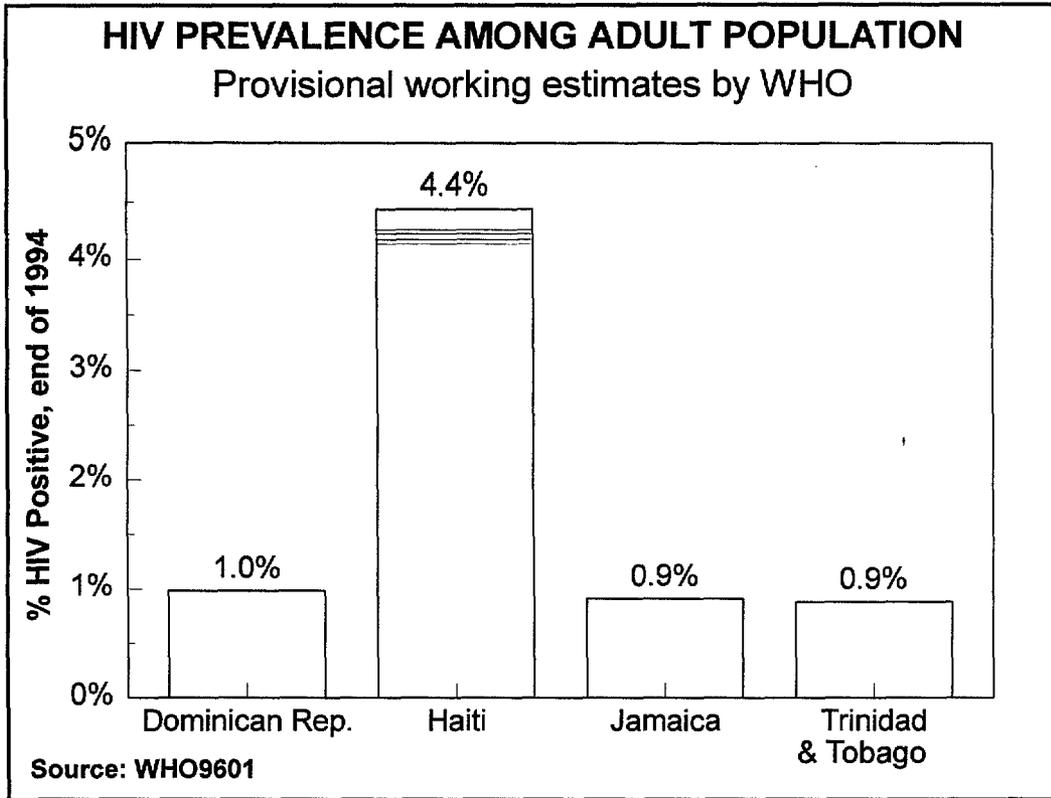
Vaccination Coverage	Dominican Rep.	Year	Source	Median values for country groupings: (CAL9606)		
				Latin Am. & Carib.	Middle Income Countries	Developing Countries
BCG	88	1995	WHE9601	95	92	90
DPT 3	100	1995	WHE9601	86	86	79
Measles	100	1995	WHE9601	86	84	78
Polio 3	94	1995	WHE9601	87	86	79
Tetanus Toxoid (2+)	87	1995	WHE9601	47	47	47

Comparative ORT Use Rates



COUNTRY	ORT USE RATE	YEAR
Dominican Rep.	29	1991
Source	DHS9111	
Median values for country groupings:		
Latin Am. & Carib.	52	1995
Middle Income Countries	63	1995
Developing Countries	51	1995
Source	CAL9606	

Human Immunodeficiency Virus (HIV) Prevalence Rates



II: HEALTH SECTOR ASSESSMENT

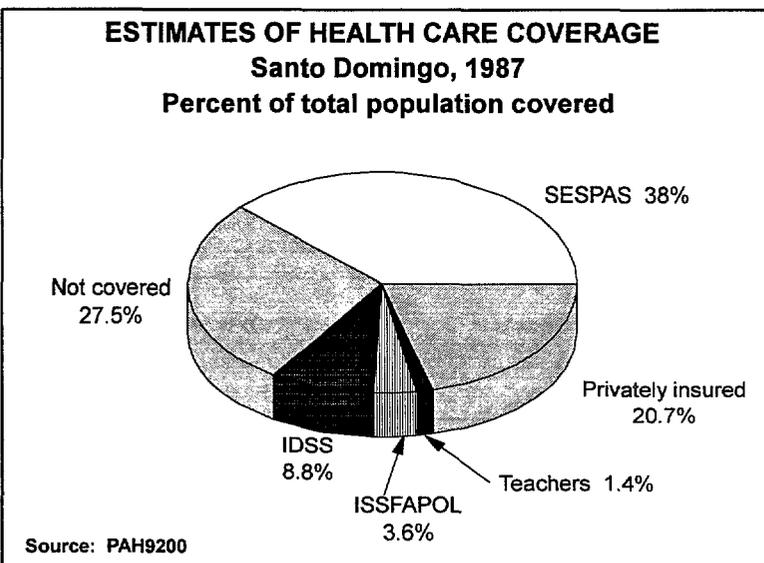
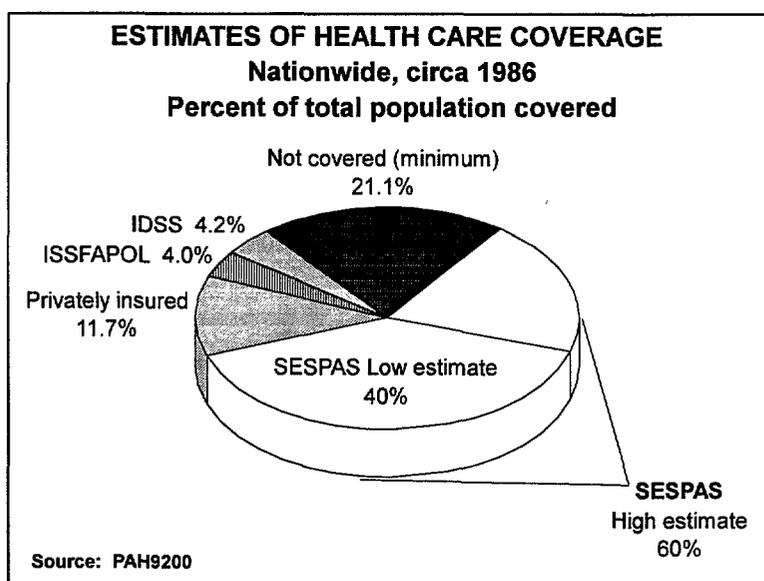
Health Care Services

OCTOBER 1993

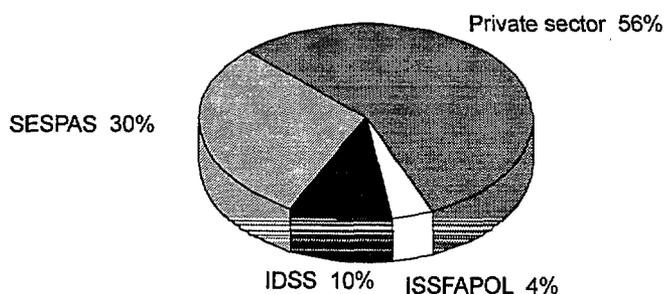
Health care in the Dominican Republic is provided primarily under the Ministry of Health (SESPAS) and in the private sector. The Dominican Social Security Institute (IDSS) and other social insurance funds offer services for only a very limited portion of the total population. The figures below illustrate recent estimates of each health care provider's share in covering the population's health needs. A recent assessment by the Pan-American Health Organization (PAHO) cited lack of coordination among major providers and minimal regulation of the private sector as two critical shortcomings of the Dominican health care system. (PAH9200)

Health resources and insurance coverage are concentrated in Santo Domingo, which in 1987 comprised 27 percent of the national population but had 55 percent of IDSS insured, 40 percent of SESPAS hospital beds, 40 percent of SESPAS hospital beds, more than half of each agency's physicians, 64 percent of private clinical beds and 69 percent of private physicians. Still, over one-quarter of the capital's population lacked coverage through SESPAS or public and private health plans. (PAH9200)

National estimates of the uninsured who lack access to public health facilities range from a very conservative 20 percent to a more realistic 40 percent (for 1986). (PAH9200) While households across income levels have displayed a clear preference for private care, (LAC8900) the diverse for-profit sector is a costly alternative for the nation's poor. In the figure on the following page, the results of a 1987 survey conducted under USAID's Health Care Financing in Latin America and the Caribbean (HCF/LAC) project give an indication of health service utilization patterns in Santo Domingo.



UTILIZATION OF HEALTH SERVICES IN SANTO DOMINGO
Outpatient visitors to doctors, by provider, 1987



Source: LAC8900 HCF/LAC Household Survey

Public Sector

The Secretary of Public Health and Social Assistance (SESPAS) is mandated to provide free health care for all uninsured Dominicans but lacks the resources required to fulfill such a duty. Although the uninsured represent roughly 80 percent of the national population, estimates of real coverage by SESPAS for the late 1980s range from 40 to 60 percent of the population. SESPAS hospitals, subcenters and clinics offer chiefly curative care, though recent programs have introduced some preventive and primary health care

for rural and marginal urban populations. PAHO's recent health sector assessment found inefficiency and lack of adequate supplies to be chronic problems at all three types of facilities. (PAH9200) Deteriorating facilities and doctors' strikes are thought to have significantly reduced utilization of SESPAS services since 1987. (LAC9000)

A separate public agency, the Program of Essential Medicines, was created in 1984 to provide SESPAS facilities and "popular" pharmacies with low-cost medicines. It is currently the largest supplier of medicines to the public sector, but it has received harsh criticism for administrative inefficiency and excessive profits, among other charges. (PAH9200)

Social Security Institutes (IDSS, ISSFAPOL)

The IDSS (Instituto Dominicano de Seguros Sociales) administers sickness-maternity and work injury programs in addition to providing benefits to affiliates for old age, invalidity and death. In 1986, IDSS covered the health needs of only roughly four percent of the national population, the lowest coverage level of all major social insurance funds in the LAC region, according to a study conducted by the World Bank. (WBK9000) IDSS coverage in the city of Santo Domingo has been estimated at 8.8 percent for 1986. The sickness-maternity program provides predominantly curative care for blue collar and lesser-paid white collar workers in the private sector. While IDSS may legally provide services through private clinics under contract, practically all care is provided at its own facilities, which in 1985 included 16 hospitals, 22 polyclinics, and 122 outpatient consultation centers. (PAH9200) Dependent coverage is limited to maternity care only for spouses and one year of curative care only for children of insured women. (IDB9101)

The armed forces and police are covered by an independent institution (ISSFAPOL) which offers similar benefits, more liberal dependent coverage, and reportedly higher quality health care services. Coverage by ISSFAPOL for 1986 was estimated at four percent of the national population. (PAH9200)

Private Sector

The 1987 household survey conducted in Santo Domingo by the HCF/LAC project found that 56 percent of outpatient visits to doctors took place at private facilities for patients across income levels.(LAC8900) Private health insurance covers roughly 10 percent of the national population, the majority in the form of "*iguales médicas*," competitive organizations comparable to health maintenance organizations (HMOs) which for a monthly fee provide predominantly curative care to a half million members (primarily lower- and middle-income workers) and their dependents.(IDB9101, LAC8900) Most civil servants are covered by these private organizations with state financing; much of the organized labor force has access to private services through collective agreements.(PAH9200)

Traditional medicines and private voluntary organizations (PVOs) such as the Dominican Red Cross are frequently the only health care alternatives for the poor who cannot afford modern, private sector services.(PAH9200) A survey conducted in 1990 by the Pan-American Health Organization found 95 Dominican PVOs active in the health sector, half of which had been established in the 1980s. PVOs are most active in and around Santo Domingo and near the border with Haiti, most commonly offering community-based maternal and child health and family planning services. Two regional consortia of PVO, SESPAS and Peace Corps representatives, COSASO (Coordinadora de Salud del Suroeste) and CMI (Comité Materno-Infantil), have emerged to coordinate PVO health activities in two health regions located on the border with Haiti.(LAC9200)

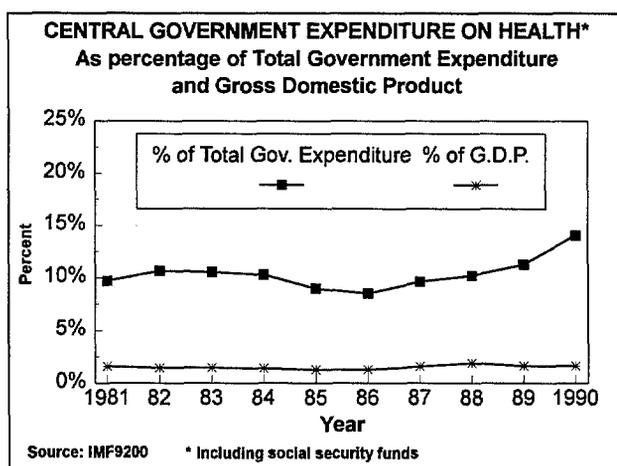
HEALTH CARE FINANCING

OCTOBER 1993

According to the World Bank, total health expenditures in the Dominican Republic accounted for 3.7 percent of the gross domestic product (GDP) in 1990, one of the lower levels of health spending relative to GDP in the Latin America and Caribbean (LAC) region. This expenditure amounted to about \$37 per person, just below the estimated \$41 per-capita spent on health in developing nations in 1990. Public expenditures on health, including those under the social security system, accounted for roughly 57 percent of total spending with private outlays accounting for the remaining 43 percent. Official foreign aid flows (included under public expenditures) amounted to an estimated four percent of total health expenditure in 1990.(WBK9303)

Public Sector

During the past decade, the Secretary of Public Health and Social Assistance (SESPAS) received just 53 percent of non-private health revenues to cover, in theory, 91 percent of the population not using the private sector.(IDB9101) The capacity of SESPAS to fulfill this ambitious mandate was reduced by decreasing central government health allocations in the economic crisis of the 1980s. (See figure at left) After a 50 percent cut in per-capita government spending on health between 1981 and 1984, SESPAS maintained its personnel budget but sharply reduced capital expenditures.(PAH9200)



The central government provides between 74 and 95 percent of the SESPAS budget, with the remainder coming from user fees and international aid and

EXPENDITURES ON HEALTH		
As percent of:		
Year	Total Gov. Expenditure	G.D.P.
1981	9.70%	1.57%
1982	10.66%	1.44%
1983	10.55%	1.47%
1984	10.29%	1.38%
1985	8.99%	1.27%
1986	8.54%	1.28%
1987	9.62%	1.58%
1988	10.20%	1.93%
1989	11.28%	1.64%
1990	14.03%	1.63%

loans.(PAH9200) The latter source has been less significant since the late 1980s, when international donors began to channel more health sector funding through private voluntary organizations (PVOs).(LAC9200) Although user fees are prohibited for inpatient care, a consultant with USAID's Resources for Child Health (REACH) project found that all SESPAS facilities studied charged various fees for outpatient care and estimated user fee revenues to cover 20 percent of hospitals' operating expenses in 1987, representing the most important financing source for non-personnel expenses.(LAC8700)

A survey by USAID's Health Care Financing in Latin America and the Caribbean (HCF/LAC) project found that 10 percent of SESPAS patients (including inpatients) in Santo Domingo paid for services and that increased fees could raise revenues without significantly decreasing coverage.(LAC8700) Various studies indicate that increased user fees could not only raise the quality of public health care in some circumstances, but also facilitate increased levels of coverage for the poor, many of whom already pay far more for private health care.(PAH9200)

Social Security System

Social insurance institutes covered the health care needs of the remaining nine percent of the publicly-served population with 47 percent of non-private health revenues in the 1980s, according to the Inter-American Development Bank.(IDB9101) Combined IDSS programs are financed by one of the lowest levels of salary contribution for social security in the region, 14.5 percent in 1988 (9.5 percent from employers, 2.5 percent from the insured, and 2.5 percent from the state, though the latter has consistently reneged on its obligation).(WBK9000,PAH9200) Imbalances in the sickness-maternity program, often covered through surpluses in the employment injury program, have commonly resulted in overall IDSS deficits.(PAH9200)

Several factors have contributed to the institute's financial woes and its inability to extend coverage to a larger segment of the population. Unusually low salary ceilings exclude civil servants and higher-income workers, depriving the institute of more substantial earnings.(PAH9200) Administrative costs have been among the highest in the LAC region (22 percent for 1983-86) and the institute's 1980s ratio of roughly one employee for each 50 insured was far and away the highest.(IDB9101) Cost recovery through user fees has also been limited. The HCF/LAC survey found that IDSS facilities regularly treat non-beneficiaries free of charge, for almost a third of outpatients surveyed were non-beneficiaries, 86 percent of whom were not charged for services rendered.(LAC8900)

Private Sector

Private sector health care services are financed under both fee-for-service and considerable prepaid arrangements. Despite fees more than 50 percent higher than those charged by SESPAS, preference for private care is evident across all household income levels.(LAC8900) According to the Inter-American Development Bank, two-fifths of Santo Domingo's poor, theoretically covered by SESPAS, resort to private services which consume roughly 12 percent of their income.(IDB9101)

Coverage of low-income workers and their families through private health plans known as "*iguales médicas*" has been facilitated through employer contributions of 75 to 100 percent of the required premium. USAID has funded several studies of the possibility of expanding coverage to excluded groups, such as microenterprise employees, who do not qualify for existing "*iguales*" but could be incorporated through trade or credit associations.(LAC9000)

In the non-profit sector, most PVOs are 90 to 100 percent dependent on international donors for financing health care programs. Cost recovery through user fees can be a secondary source of income; direct support from the Dominican government is minimal, though SESPAS does provide medical staff for sexually-transmitted disease clinics operated by one PVO, the Centro de Orientación e Investigación Integral (COIN). The prospect of decreasing external support in the 1990s means that many PVOs must develop alternative financing sources to ensure their survival.(LAC9200)

III: HIV / AIDS

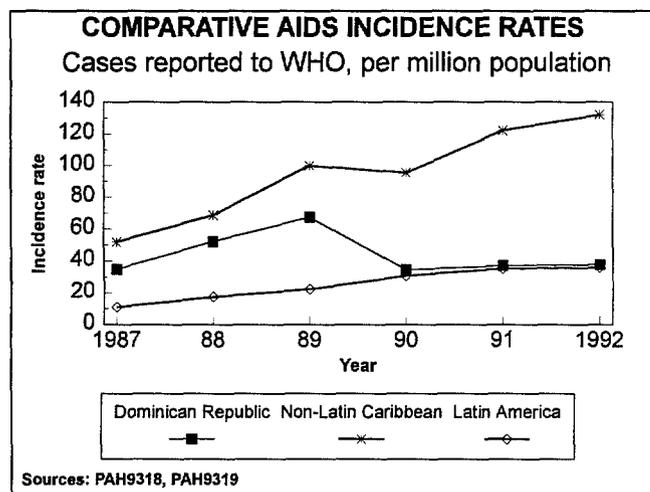
OCTOBER 1993

The information below is based on reports to WHO through June 30, 1993: (PAH9318)	
Total reported AIDS cases	2060
Deaths attributed to AIDS	229
1992 Incidence rate (per 1 million population)	37.7
Male/female ratio (1992)	3.0:1
Pediatric cases	44 (2.1% of total)
Perinatal cases	21 (1.0% of total)

Since 1987, annual incidence rates for AIDS cases reported in the Dominican Republic have been relatively high for Latin America but remain below the average for the Caribbean region. Underreporting of actual cases has been estimated by the Ministry of Health (SESPAS) to be as high as 75 percent, largely due to a lack of systematic notification by doctors and laboratories and, since mid-1990, an acute shortage of materials for blood-testing.(PAH9201) SESPAS, which initiated a sentinel surveillance system in 1991, acknowledges that some underreporting continues and estimates a total of 50,000 HIV-carriers nationwide.(PAH9201)

Although the earliest AIDS cases were reported among homosexuals starting in 1983, within five years 70 percent of cases were reported to have resulted from heterosexual transmission.(AID0002) The greatest impact has occurred around Santo Domingo and Puerto Plata and in sugar-producing regions utilizing migrant labor. Increasing levels of HIV infection among women and children indicate that the epidemic has spread to the general population. While the non-Latin Caribbean (the Caribbean excluding Cuba, Haiti, the Dominican Republic and Puerto Rico) has just recently reached a ratio of less than two males for each female reported with AIDS, the Dominican Republic had a ratio of 1.9 in 1987 and stabilized around there through 1991, maintaining the lowest such ratio of any Spanish-speaking nation in Latin America.(PAH9301)

AIDS: New cases and incidence rates (PAH9318, PAH9319)				
Year	New cases	Comparative incidence rates (per million)		
		Dominican Republic	Non-Latin Caribbean	Latin America
1983	5	--	--	--
1984	8	--	--	--
1985	47	--	--	--
1986	70	--	--	--
1987	226	34.8	51.8	11.1
1988	357	52.0	68.6	17.4
1989	473	67.4	99.9	22.2
1990	248	34.6	95.4	30.8
1991	272	37.2	122.2	35.3
1992	282	37.7	132.2	36.0



National AIDS Control Program

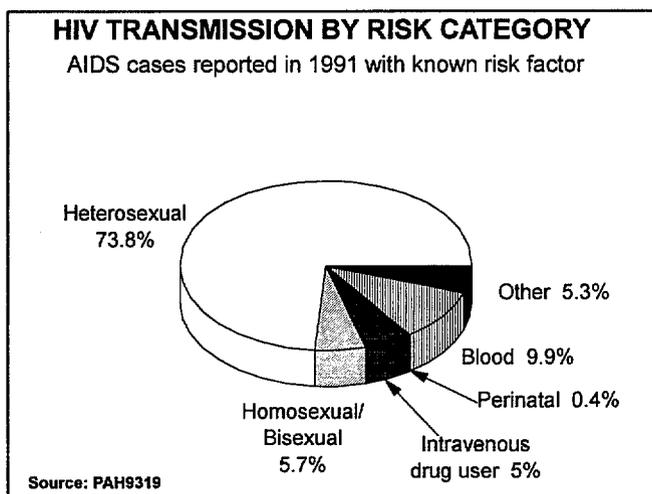
(PAH9304)

Programa de Control de Enfermedades de Trasmisión Sexual y SIDA (PROCETS), Secretario de Estado de Salud Pública (SESPAS), Santo Domingo.

Advised and guided by a multi-sectoral National AIDS Commission (CONASIDA), PROCETS has concentrated on improving screening of blood for HIV and establishing a sentinel surveillance system. Another priority, the collection and dissemination of AIDS information, has been facilitated

through SESPAS' Centro Nacional de Comunicación Educativa para la Salud (CENACES). Other activities include intervention programs among high-risk groups in Santo Domingo and Puerto Plata and mass media campaigns for the general population. Integrated health care needs of persons affected by HIV and AIDS are to be addressed by a special reference and training center in Santo Domingo, a project that

commenced in mid-1992. USAID, through the AIDSCAP project, plans to continue support for the health ministry's sentinel surveillance system and quality control programs for blood banks and laboratories.



Population sampled	Sex	Year	% HIV-positive	Sample size
Prostitutes at STD Clinic, Santo Domingo	F	1987-89	2.60%	3,000
Blood Donors, Location Unspecified (LU)	B	1988	0.60%	20,444
Blood Donors (LU)	B	1989	0.80%	18,560
Sugar Cane Workers	B	1990	9.30%	397
Pregnant Women, Santo Domingo	F	1991	1.25%	400
Pregnant Women (LU)	F	1992	0.80%	1,056
STD Clinic Patients (Private)	B	1992	4.00%	867
STD Clinic Patients (Public)	B	1992	5.00%	818
Prostitutes at STD clinics (LU)	F	1992	3.40%	265

Local Non-Governmental Organizations with AIDS Activities

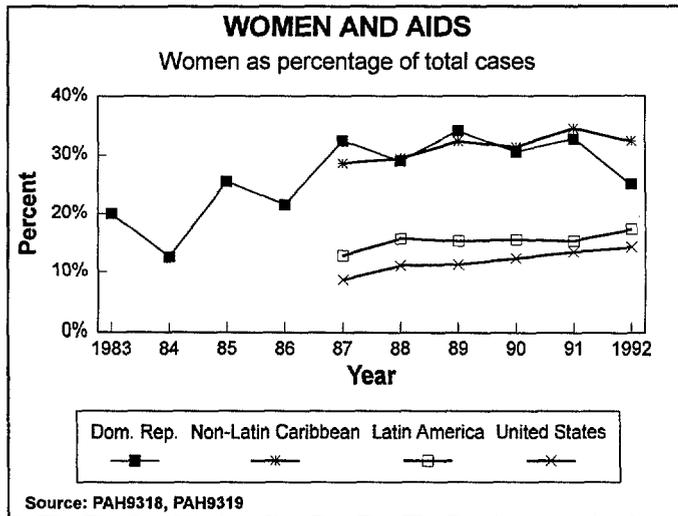
(AID0003, IPP9300, AID0002, PAH0001, PAN9100)

ADOPLAFAM (Asociación Dominicana de Planificación Familiar) offers HIV/AIDS education and prevention services with its community-based family planning program.

ASA (Amigos Siempre Amigos) has promoted peer education among gay and bisexual men in four cities and conducted outreach, training and condom distribution activities to prevent the spread of HIV/AIDS. ASA collaborates with COIN in supporting peer education activities of the "Avancemos" group.

Association of Blood Banks has worked to improve blood screening and contributed to AIDS communications activities.

CASCO (Coordinadora de Animación Sociocultural) conducts AIDS awareness outreach for youth and trains community health messengers in Santo Domingo. CASCO also participated in



Year	Dom. Rep.	Non-Latin Caribbean	Latin America	United States
1983	20.0%			
1984	12.5%			
1985	25.5%			
1986	21.5%			
1987	32.4%	28.6%	12.7%	8.6%
1988	29.0%	29.4%	15.6%	11.0%
1989	34.1%	32.3%	15.2%	11.2%
1990	30.5%	31.3%	15.4%	12.2%
1991	32.7%	34.5%	15.2%	13.3%
1992	25.0%	32.3%	17.2%	14.1%

intervention research supported by USAID's AIDSCOM Project in Haina.

COIN (Centro de Orientación e Investigación Integral) has conducted research, outreach and training activities and provided logistical support to other NGOs combatting HIV/AIDS. Peer education projects in several cities include the "Avancemos" group, which has trained hundreds of "health messengers" for outreach, education and condom distribution in Santo Domingo, Puerto Plata, Santiago, and La Romana.

COVICOSIDA (Comité de Vigilancia y Control del SIDA), a local AIDS control committee in Puerto Plata, conducts AIDS prevention activities targeting high-risk groups.

FUCES (Fundación Cultural y Educativa para el Salud) promotes AIDS awareness throughout the Dominican Republic through drama performances followed by discussion sessions for youth and community volunteers.

Free Trade Industrial Association has collaborated with COIN in AIDS prevention activities targeting male and female factory workers in Haina.

ID (Dermatologic Institute) has collaborated with COVICOSIDA, COIN and the health ministry in AIDS prevention activities targeting commercial sex workers and their clients in Puerto Plata.

IDDI (Dominican Institute for Integral Development) integrates HIV/STD prevention into a broader urban community-based development program. A special intervention project in two marginal neighborhoods in Santo Domingo involves training of volunteer educators, developing educational materials and establishing information and condom distribution points.

INSAPEC (Instituto APEC de Educación Sexual) has provided counselling and counselor training, conducted research, and supported HIV/AIDS education efforts in Santo Domingo.

PLUS (Patronato de Lucha contra el SIDA) is a group of professionals and technical specialists formed to promote HIV/AIDS awareness and to organize AIDS prevention groups. PLUS has facilitated technical and financial support for community groups and medical researchers, offered emotional support programs for HIV-positive patients and their families, and established condom distribution sites and a country-wide, community-based AIDS information and referral network for young adults. PLUS volunteers have conducted outreach and promoted peer education among adolescents, commercial sex workers, and the general population.

PROFAMILIA (Asociación Dominicana Pro Bienestar de la Familia), an IPPF affiliate, runs a community-based family planning program offering services to help prevent HIV/AIDS and other sexually-transmitted diseases.

International NGOs with AIDS activities in the Dominican Republic

(NCI9201, IPP9300)

American Red Cross
Center for Population Options
Christian Children's Fund
International Planned Parenthood Federation (IPPF)
St. Clare's Hospital and Health Center

International Donors supporting AIDS activities in the Dominican Republic

(PAH9201, UNF9200)

Canadian International Development Agency (CIDA)
European Economic Community (EEC)
Pan-American Health Organization (PAHO)
United Nations Population Fund (UNFPA)
United States Agency for International Development (USAID)
World Health Organization, Global Programme on AIDS (WHO/GPA)

IV: DATA NOTES

I. Note On Mortality Estimation

Various organizations produce mortality estimates for the developing countries and regions. The three largest sources are the United Nations Population Division, the World Bank and the United States Bureau of the Census. CIHI's Health Statistics Database draws upon the work of these three larger organizations as well as other sources in order to reconcile the various estimates and provide the most reasonable current and historical estimates available.

CIHI has also created the only comprehensive time series of under-five mortality estimates for all developing countries. This has been accomplished by developing mathematical equations from empirical data that describe the relationship between infant and under-five mortality. Using these equations it is possible to make estimates of under-five mortality from infant mortality or *vice-versa*. More details regarding CIHI's methodology for specific data sets are provided in the source references.

II. Definitions

Demographic indicators:

Annual Infant Deaths: An estimate of the number of deaths occurring to children under age one in a given year.

Average Annual Rate of Population Growth: An estimate of the rate at which a population is increasing (or decreasing) in a given year.

Children Under Age 1: Mid-year estimate of the total number of children under age one.

Contraceptive Prevalence Rate: Estimate of the proportion of women

aged 15 through 44 (sometimes 15 through 49) currently using a modern method of contraception. For some countries, this data is only available for women in union or married. Where sources fail to distinguish modern and traditional methods, the combined rate is shown.

Crude Birth Rate: An estimate of the number of live births per 1,000 population in a given year.

Crude Death Rate: An estimate of the number of deaths per 1,000 population in a given year.

Infant Mortality Rate: The estimated number of deaths in infants (children under age one) in a given year per 1,000 live births in that same year. This rate may be calculated by direct methods (counting births and deaths) or by indirect methods (applying well-established demographic models).

Life Expectancy At Birth: An estimate of the average number of years a newborn can expect to live. Low life expectancies in developing countries are in large part due to high infant mortality.

Maternal Mortality Rate (or Ratio): Estimated number of maternal deaths per 100,000 live births where a maternal death is one which occurs when a woman is pregnant or within 42 days of termination of pregnancy from any cause related to or aggravated by the pregnancy or its management. Extremely difficult to measure, maternal mortality can be derived from vital registration systems (usually underestimated), community studies and surveys (requires very large sample sizes) or hospital registration (usually overestimated).

Total Population: Mid-year estimate of total number of individuals in a country.

Total Fertility Rate: Estimate of the average number of children a woman

would bear during her lifetime given current age-specific fertility rates.

Under 5 Mortality Rate: The estimated number of children born in a given year who will die before age five per 1,000 live births in that same year. May be calculated by direct or indirect methods.

Urban Population: Population living in urban areas as defined according to the national definition used in the most recent population census.

Child survival indicators:

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 WHO. The indicator for the population as a whole is the proportion of children 12 through 23 months of age who are adequately nourished.

Complementary Feeding: An estimate of the proportion of infants six to nine months of age (181 days to 299 days) still breastfeeding but also receiving complementary weaning foods.

Continued Breastfeeding: An estimate of the proportion of children breastfed for at least one year. Values presented in this report are the proportion of children 12 to 15 months of age at the time of the survey still receiving breast milk.

DPT Drop-out Rate: An estimate of the proportion of living children between the ages of 12 and 23 months

who received at least one DPT vaccination but who did not receive the entire series of three vaccinations before their first birthdays.

Exclusive Breastfeeding: An estimate of the proportion of infants less than four months (120 days) of age who receive no foods or liquids other than breast milk.

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 who receives adequate supplies. This indicator is particularly difficult to measure and may fluctuate dramatically as various methods of estimation are devised.

ORT Use Rate: Estimate of the proportion of cases of diarrhea in children under five treated with ORS and/or RHF (a recommended home fluid). ORT use may be determined using administrative means or surveys. Administrative estimates are generally based on estimates of the number of episodes of diarrhea in the target population for a given year and the quantity of ORS available; these estimates are highly sensitive to changes in estimates of the frequency of diarrhea episodes. Surveys more precisely focus on the actual behavior of mothers in treating diarrhea in the two-week period prior to the survey.

Vaccination Coverage In Children: 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). Rates are calculated in two ways: Administrative estimates are based on reports of the number of inoculations of an antigen given during a year to children who have not yet reached their first birthday divided by an estimate of the pool of children under one year of age eligible for vaccination. Survey estimates are based on samples of children between the ages of 12 and 23 months.

Vaccination Coverage In Mothers:

Estimate of the proportion of women in a given time period who have received two doses of tetanus toxoid (TT) during their pregnancies. A revised indicator, referred to as TT2+, is now commonly used to account for the cumulative effect of TT 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. (This number varies with number received previously and the time elapsed.) Rates are computed using administrative methods or surveys.

Other health sector indicators:

Access to Adequate Sanitation: Definitions vary over time. In the past, this has been an estimate of the proportion of the population with sanitation service provided through sewer systems or individual in-house or in-compound excreta disposal facilities (latrines). After WHO changed its indicators and definitions in the late 1980s, this is now defined as the proportion with reasonable access to sanitary means of excreta and waste disposal, including outdoor latrines and composting.

Access to Health Services: An estimate of the proportion of the population that can reach appropriate local health services by local means of transport in no more than one hour. Recently WHO has revised its definition to the proportion of the population having treatment for common diseases and injuries and a regular supply of the essential drugs on the national list within one hour's walk or travel.

Access to Safe Water: Proportion of the population with reasonable access to safe water supply, including treated surface waters or untreated but uncontaminated water such as that from

springs, sanitary wells or protected boreholes. Reporting can be highly subjective. Varying definitions are used for reasonable access in urban/rural areas:

Access to Safe Water, Urban: Estimate of the proportion of all persons living in urban areas (defined roughly as population centers of 2,000 or more persons) who live within 200 meters of a standpipe or fountain source of water. **Access to Safe Water, Rural:** Estimate of the proportion of all persons not living in urban areas with a source of water close enough to home that household members do not spend a disproportionate amount of time fetching water.

Births Attended by Trained Personnel: An estimate of the proportion of births attended by at least one physician, nurse, midwife, trained primary health care worker, or trained birth attendant.

HIV Prevalence: Estimate of the proportion of a given population infected with HIV.

V: SOURCES

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- CAL9603 Calculated number of live births to women of reproductive years (15-49) in 1995. Calculated from the population multiplied by the crude birth rate for each country.
- CAL9604 Calculated number of deaths occurring to children under the age of 1 in a given year (1995). Figures based on the number of births multiplied by the infant mortality rate.
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