

I. HEALTH PROBLEMS AND PROGRAMS IN CENTRAL AMERICA

A. Summary of Health Status in Central America

The major health problems of Central America which contribute to high infant and child mortality and to low productivity in the adult population are: acute respiratory illnesses, diarrheal diseases, early childhood diseases, malaria, tuberculosis, and wounds and injuries related to employment, accidents and civil unrest. While there have been considerable improvements in health status in Latin America and the Caribbean in the last twenty years, Central America continues to lag behind the rest of the hemisphere.

The infant mortality rate (number of deaths 0-1 year of age per 1,000 live births) is generally considered to be the most sensitive indicator of the health status of a population, particularly in the developing world. As of 1980, Central America had the highest regional infant mortality rate in Latin America. (See Table I Annex I for regional and country specific health indicators).

More than 75% of infant deaths are due to respiratory illness, diarrheal diseases, perinatal deaths (complications of delivery, prematurity, etc.) and infectious and parasitic diseases. Malnutrition is the primary contributing factor to infant deaths. As with infant mortality, Central America has the highest rate of child mortality (1-4 years of age) in the

hemisphere. High rates of child mortality are also closely linked to malnutrition, respiratory diseases, and diarrheal diseases.

Other major communicable diseases which affect the entire population, which therefore affect productivity and fertility outcome (low birth weight, prematurity, etc.) are: malaria, dengue fever and tuberculosis. Of these diseases, clearly the most important is malaria. Malaria cases in Central America have almost doubled since 1978. The resurgence of malaria is a particularly significant problem due to the resistance of the malaria carrying mosquito to most pesticides in most malarious areas of Central America. This resistance is due to the extreme and uncontrolled use of pesticides for agricultural production. More recently, population movements and the primitive living conditions of large numbers of displaced persons and refugees have become factors which increase the transmission of malaria in Central America.

Epidemics of dengue fever (a virus) have occurred frequently in Central America since 1977. The increasing importance of dengue fever is due to: (1) the appearance of a hemorrhagic dengue, a deadly form of the disease in 1981-82 (in Cuba), (2) the high transmissibility of this disease and the presence of the disease vector in the United States, and (3) the high cost of this disease including losses in tourism and productivity. In September 1980 the first cases of dengue fever since 1945 were reported in the United States.

Tuberculosis (TB) is still an important problem in Central America. Reductions in mortality from TB are related to the coverage and quality of health services. Reductions in the incidence of TB are related to levels of socioeconomic development and environmental considerations (housing, sanitation). As at least four countries in Central America fall behind most other countries in the hemisphere with regard to these factors; it may be assumed that reductions in both mortality and incidence of TB in Central America will be fewer and slower than in the rest of the hemisphere (except perhaps Bolivia and Haiti).

Finally, malnutrition constitutes a significant public health problem and barrier to economic development and political stability in Central America. Thirty to sixty-five percent of all households in Central America consumed fewer than the minimum daily requirements for calories. The northern countries of Central America (Honduras, El Salvador and Guatemala) continue to report more than 25% of the child population to be severely or chronically malnourished.¹

¹ Malnutrition is best described using anthropometric measurements i.e. weight-for-age of children as a percent of the weight-for-age of a standard reference population. Severe malnutrition is less than 60% weight-for-age of the standard reference population. This is also known as third degree malnutrition. Chronic malnutrition is less than 75% weight-for-age of the reference population.

(Additional nutrition indicators are provided in Table II, Annex I). Recent data suggest that the political unrest and economic difficulties of the past few years have had a significant deleterious effect on nutritional well-being in virtually all Central American countries. This is particularly true in El Salvador. While nutrition interventions introduced through health services can significantly improve nutrition status, additional interventions are required particularly in agriculture, rural development, industrial development, education, and housing, in order to address the underlying causes of malnutrition.

While health status in Central America is generally poorer than in the rest of Latin America and the Caribbean, considerable variation exists within Central America, both with regard to the types of health problems faced by each country and the way individual countries choose to address their health problems.

In comparing countries within Central America on the basis of health status, it is evident that Costa Rica and Panama are considerably better off than other Central American countries.

The countries with the most severe health problems are Honduras and Guatemala. Nicaragua, formerly at the lower end of the scale, has shown considerable improvements in extending health services since the revolution. With regard to El Salvador, recent data demonstrate that health status has significantly

declined due to continued violence, a declining economic situation, sustained high population growth rates, growing numbers of displaced persons and high levels of malnutrition. Belize generally compares well to the rest of Central America, but is still considerably worse off than other English speaking Caribbean countries.

B. Health Programs in Central America

Considerable external support has been provided in the last 10 years to all Central American countries for the development and expansion of health services. Major donors have included the Inter American Development Bank, the World Bank, the U.S. Government, UNICEF, the Pan American Health Organization, and more recently the Government of Japan. The major activities supported by external donors in the last five years include construction of hospitals, health centers and water systems (IDB, IBRD, UNDP, U.S. Government), the provision of equipment (IDB, UNICEF, PAHO) and expendable supplies (UNICEF, Government of Japan-pesticides), training (PAHO) and technical assistance (PAHO, USG). Summary tables for external donor support in health are attached as Annex II.

Until recently, each of the Central American countries involvement in the health sector centered on hospital support primarily in urban areas. With the exception of Costa Rica, these services were and are funded out of general tax revenues

rather than being based on fee-for-service or on insurance schemes.² By concentrating the vast majority of public sector health expenditures on urban hospitals, the gap in health status and access to health services between urban and rural areas widened, especially during the 1960's and early 1970's. To remedy this situation primary health care programs were designed as a means of providing basic preventive and curative care at relatively low cost to rural, low income populations.

The major thrust of U.S. Government support, since the mid-1970's has been (a) the extension of basic preventive primary health care services in rural areas, and (b) the development of village level water systems. Water and primary health care (PHC) projects have been and/or are being implemented in all of

² The vast majority of health services in Costa Rica are provided by the Social Security Institute and financed by payroll taxes. Public sector programs financed from tax revenues include only public health activities, i.e. immunization, water and sanitation, etc.

the countries except Belize. Considerable USG support has in the past been provided for vector control, but this assistance has fallen off (with the exception of Honduras) since the primary health care strategy was adopted in the mid 1970's.

While there has been considerable improvement in health status as a result of providing basic primary health care services to rural areas, the implementation of these programs has proven unwieldy, inefficient and fraught with serious recurrent cost problems. The public sector in Central America now supports both hospital based and primary health care. The high capital and recurrent costs for the hospital based curative system still consume a major part of the public sector health budget in Central America. Primary health care services, while less costly per capita, nonetheless generate considerable recurring costs for manpower, facilities and vehicle maintenance, vaccines and drugs and transportation. Central American governments are not likely to increase significantly, in the short term, the proportion of their budgets allocated for the health sector, particularly given the demand which agricultural and industrial development and civil unrest place on limited government resources.³ Therefore, in order to achieve the

³ An exception to this statement is Nicaragua whose health budget since the revolution has jumped from less than 5% of the public sector budget to approximately 20% of the budget.

desired improvements in health status outlined below, an extensive reorientation in the financing and delivery of health services and water systems needs to take place in Central America.

Certain policies and practices in all of the Central American countries need to be reexamined, e.g.: commitment to providing free health services to all; willingness to expand existing health services at a rate far beyond the government's management and financing capacity; failure to recognize the important role played by private sector health care providers; import tariffs and other restrictions on imports (pharmaceuticals); lack of incentives to encourage health personnel to practice in rural areas; etc. New financing mechanisms need to be explored in all Central American countries including user fees (copayments in Costa Rica), health insurance schemes, community-based financing through cooperatives, revolving funds for pharmaceutical procurement, etc. In addition, hospital cost containment strategies need to be developed to free up resources for the expansion of basic preventive and curative services that will reduce mortality and morbidity from those illnesses which most affect economic and social development. This is particularly crucial in the short run, as the recommendations outlined below call for a significant expansion in primary health care services extending coverage two to three times its present level in some countries. Finally, much more must be done to improve the

efficiency of primary health care services, including: better management and administrative systems, greater private sector involvement, and more systematic assessments of alternative health care options.

Long term financial viability and improved management are also of concern in the areas of water and sanitation due to:

(a) the extremely high costs of these interventions, and (b) the considerable past and present involvement of external donors in the area. In order to expand coverage of water systems, new sources of financing, particularly for recurrent maintenance and operational costs, will need to be identified including user fees, subsidization of communal systems through increasing fees for household connections, raising per unit costs of water as volume used rises, community funds, etc. In addition, improved management will be required to set up and implement service standards and tariffs, to design and implement operation and maintenance procedures, to bill and collect fees and to plan for efficient and equitable water use.

By promoting the expansion of only a selected group of high impact health services, by incorporating support for the "systems improvement" needed for delivery of these services, and by including the private sector where appropriate, the recommended health activities for Central America outlined below will have a significant effect on improving health status, improving the quality and efficiency of primary health care programs, and institutionalizing donor and country investments in the health sector.

II. RECOMMENDATIONS FOR IMPROVING HEALTH STATUS

1. PROBLEM: Maternal malnutrition, low birth weight, high fertility, and high incidences of childhood diseases, contribute to the sustained high infant, child and maternal mortality rates in Central America. Both infant death rates and child malnutrition increase dramatically if a mother already has four surviving children. In El Salvador, the infant death rate rises from 85/1,000 for the fourth child to 160/1,000 for five or more children. Major causes of death for infants and children in Central America are malnutrition, acute respiratory diseases, diarrheal diseases, and the early childhood "immunizable diseases" (measles, polio, diphtheria, whooping cough, tetanus).

Goals: (a) Expand immunization coverage to 90% of the population of children less than 1 year of age and 100% of pregnant women (5 years), (b) reduce the percentage of low birth weight babies by 50% (10 years), (c) reduce the average number of children per family from present levels of more than 5 children to not more than two.

Interventions:

1. Supply adequate vaccines, cold chain equipment and transportation to vaccinate 90% of the at risk population (5 years).

2. Provide at least four prenatal care consultations including nutritional assessment for all pregnant women (10 years). Target supplementary feeding programs to malnourished pregnant women.

3. Provide contraceptives through public health services to 40% of couples in the reproductive age group (10 years).

2. PROBLEM: Dehydration due to diarrhea is a major health problem in Central America (see Annex I, Table III). This is in spite of the fact that Oral Rehydration Therapy (ORT) can effectively rehydrate individuals, thus avoiding death. A.I.D. is currently working with ORT in Honduras through a national mass media campaign which complements distribution of the Oral Rehydration packets through the national health system. As a result of this program, recognition of ORT as a diarrheal remedy has gone from 0% to 93% of the population. Similar ORT initiatives should be considered for other countries in the region, particularly El Salvador, Guatemala, and Nicaragua.

Goal: Expand the awareness and use of ORT in all Central American countries, to reach 10% of the population in 2-3 years, 60 % of the population in 10 years, thereby reducing infant and child mortality due to diarrhea.

Interventions: A central office in each Ministry of Health should be created to promote, distribute, train, carry out research and offer technical assistance for the introduction of ORT into all primary health care programs, both public and private sector. Specific activities should include:

1. ORT packets

Strengthen local production capabilities in Honduras and Costa Rica. Packets would be imported by the remaining countries while the feasibility and cost-effectiveness of local production is being determined (2-3 years).

2. Public Education

Establish six national programs, similar to the Honduras program (2-3 years)

3. Medical Education

Establish ORT wards in at least three teaching hospitals in each of the seven countries (2-3 years).

4. Logistics

Strengthen the procurement and distribution system of medicines and supplies, including ORT (2-3 years).

5. Technical Assistance

Provide technical assistance to each country to plan and coordinate activities for the first two years.

6. Research

Implement basic and operations research to provide specific country data on feeding habits, cereal-based ORT solutions, alternate delivery mechanisms, etc. (5-10 years).

3. PROBLEM: Malnutrition, which is related to inadequate consumption of food (a function of income, food prices, etc.), to inadequate intra-familial distribution of food (a function of education, cultural practices), and to insufficient biological utilization of food (a function of disease incidence), continues to be a serious obstacle to economic development in Central America. Thirty to sixty-five per cent of all households in Central America consume fewer than the minimum daily requirements for calories.

Malnutrition, once largely a rural phenomenon, is becoming more common in marginal urban areas and is correlated with female heads of households in these areas. While improvements in nutrition status have occurred in some countries (Costa Rica, Panama) recent reports indicate that the current economic situation and political unrest in the region are having a

considerable negative effect on nutritional well being. The prevalence of heavy intestinal parasitic infections in children is also a significant contributing factor to malnutrition in Central America. The effects of these infections are most pronounced in undernourished children because of poor utilization of food, combined with deficiencies in energy intake, proteins, vitamins and trace elements. Chronic parasitic infections can effect the physical and mental development of children.

Goals: (a) Eliminate malnutrition in its most severe form in 10 years (third degree malnutrition = 60% or less of standard weight for age), (b) reduce chronic undernutrition by one-half in Guatemala, Honduras, El Salvador, Panama and Nicaragua. (Chronic undernutrition = growth retardation = 2nd degree malnutrition).

Interventions:

1. Introduce growth monitoring into all primary health care programs in the public and private sectors (2-3 years).
2. Target supplementary feeding programs to those families with women and and children identified as malnourished (10 years).
3. Routinely de-worm all children under ten years of age with a broad spectrum anti-helminthic drug effective against

ascariasis(roundworm), trichuriasis (whipworm), enterobiasis (pinworm) and hookworm infections (2-3. years).

4. PROBLEM: Throughout Central America vector borne diseases, particularly malaria and dengue fever constitute a continuing and serious health threat impeding orderly social and economic development. Since 1978, malaria cases have almost doubled in Central America with El Salvador, Belize, Guatemala, Nicaragua, and Honduras being especially stricken. Anti-malaria programs have deteriorated due to (a) widespread and growing mosquito resistance to commonly used insecticides; (b) increasing resistance to anti-malaria drugs of the parasite P. falciparum , an especially virulent type of malaria;(c) population movements and inadequate housing; and (e) problems associated with civil unrest. Dengue fever, a virus transmitted by mosquito, is endemic throughout Central America in both urban and rural areas. In 1982, approximately 10,000 cases were reported in Central America. While Costa Rica and Panama support effective measures against dengue fever through control of mosquitos, other countries have not been able to effectively control this disease. Most control efforts against dengue fever are carried out through the national malaria services in each country or the public health services. Dengue fever has serious economic implications, represents a health threat to the United States and is growing more serious due to the appearance of a hemorrhagic form of the disease. Onchocerciasis, otherwise known as river blindness, is endemic in Guatemala and Mexico. Of the 22 Administrative Departments

of Guatemala, 7 have foci of this severely debilitating disease. There are no safe and effective drugs to prevent or cure this disease.

Goals: (a) Reduce Central America's malaria rate to 1978 levels through improved and expanded country operations (a reduction of more than 100,000 cases could be achieved in 2-3 years) (b) Reduce national malaria rates to less than 2 cases per 1,000 population (ten years), (c) Eradicate dengue fever in urban areas (10 years) (d) Control outbreaks of dengue fever in rural areas (2-3 years) (e) Achieve zero transmission of onchocerciasis by 1990.

Interventions

1. Establish a Central American vector borne disease training and research institute to train at least 1200 professionals in entomology, epidemiology, and management of vector borne disease control programs. In addition, 50,000 malaria volunteers and 6,000 health service personnel should be trained in malaria control (10 year target). Three thousand health workers and sanitarians should be trained in dengue fever control.
2. Increase operational research in the areas of insecticide and drug resistance (5-10 years).

3. Establish urban malaria programs in areas at risk (2-3 years).
 4. Support research efforts (at new institute) to develop a dengue fever vaccine (10-20 years).
 5. Design and implement public education campaigns on malaria and dengue fever control, focusing on community participation in environmental management (2-3 years).
 6. Improve epidemiological surveillance of malaria and dengue (2-3 years).
 7. Provide equipment and supplies for the control of malaria and dengue fever outbreaks (2-3 years).
 8. Retrain Guatemalan personnel presently employed in the onchocerciasis program, reorienting them to the successful vector control using technologies developed in Africa (2-3 years).
 9. Provide equipment and supplies for onchocerciasis control (2-3 years).
5. PROBLEM: Lack of adequate water supply and sanitation facilities precludes the attainment of adequate health, maximum productivity, and an acceptable quality of life. An insufficient and unsatisfactory water supply is

probably the single greatest deterrent to a productive population with adequate health and nutritional status. Diseases which are related to access to water, and water quality and which are prevalent in Central America, include: fecal/oral diseases (polio, typhoid and paratyphoid, roundworm, gastro-enteritis, and infectious hepatitis), skin diseases (scabies), and vector borne diseases (malaria, dengue fever, leishmaniasis, filariasis and onchocerciasis).

Goals: (a) Increase urban and rural water and sanitation coverage by 10 % in three years, (b) Increase urban and rural water and sanitation coverage by 60% in ten years.

Interventions:

1. Establish and maintain water sector agencies with the institutional capability to plan, select appropriate technology, design, construct, finance, operate, maintain, and manage their systems.
2. Maximize the use and development of Central American industries to produce the equipment and supplies to carry out water activities (e.g. local manufacture of simple water pumps, etc.)
3. Establish the capability in each country for water system rehabilitation and maintenance.

6. PROBLEM: Deaths from accidents and homicides have become a significant problem in Central America. In Costa Rica, El Salvador and Honduras these causes account for 10-15% of reported deaths (1979 data). In addition, accidents and illness are frequently encountered in the workplace, industry and agricultural operations, mines, etc. While no regional data is available, it is estimated that the incidence of occupational accidents is 6-10 times greater in developing than industrialized countries with the consequent negative social and economic impact. No country in Central America is adequately equipped to provide emergency medical care particularly for those injuries resulting from the spread of political violence (El Salvador, Guatemala, Nicaragua and Honduras).

Goals: Improve emergency medical services at all levels of the health delivery systems in Central America to reduce deaths and permanent disability from work-related injuries and to reduce unnecessary deaths and disability from war related injuries.

Interventions:

1. Train all community level primary health care workers in first aid (5 years).
2. Train physicians, particularly surgeons, in trauma management (2-3 years).

3. Establish transportation and communications systems for emergency medical services (3-5 years).

7. PROBLEM: During the past five years case detection of tuberculosis in Central America has averaged a rate of 67 per 100,000 population, as compared with 13/100,000 in North America. Thus, tuberculosis has remained a major public health problem in all countries in the region and represents a significant public health problem for the US due to emmigration patterns. This is significant as modern, available control measures are highly effective and are no longer dependent on medical specialist services. The drastic reduction of the prevalence and incidence of tuberculosis should be a high priority for national public health programs. Major constraints to reducing TB, such as patient compliance with treatment regimens lasting more than one year, opposition to integrating casefinding and treatment of TB into general health services, and poor diagnostic capability in general hospitals and clinics have been largely overcome. The greatest impact on the success of TB control programs has been the introduction of new and effective drugs. These treatments have reduced the risk of TB mortality, shortened the time of communicability and improved patient compliance. Despite these successes TB continues to be a significant public health problem in Central America with the highest incidences in El Salvador, Guatemala and Honduras.

Goals: (a) Full treatment compliance of all known TB cases by 1985; (b) Systematic casefinding and TB surveillance by 1987; (c) Extension of TB services to general health facilities in remote areas, followed by casefinding and treatment by 1990.

Interventions

1. Establish training programs for health professionals in all countries for improved screening and diagnostic techniques for TB (2-3 years).
2. Provide resources for drugs, equipment and supplies for TB control programs (2-3 years).
3. Implement field research on efficacy of BCG vaccination on population (5 years).
4. Expand, where appropriate, BCG immunization program (2-3 years).

ANNEX I

TABLE I

Comparative Health Indicators - Central America 1979-1980

	<u>IMR*</u>	<u>CMR**</u>	<u>Cases Malaria/ 100,000</u>	<u>Cases TB/ 100,000</u>
Belize	27	1.6	944	13
Costa Rica	19.1	1.3	17	20
El Salvador	53.0	6.9	1991	47
Guatemala	85.9	12.4	863	78
Honduras	87	4.3	1160	52
Nicaragua	101.7	3.6	816	35
Panama	21.3	2.1	17	
North America	19	1.3	1.1	12.1
Caribbean (English speaking)	28.4	2.4	45.2***	44**
South America	59.8	5.8	68	69

* Deaths 0-1 year of age/1,000 live births

** Deaths 1-4 years of age/1,000

*** Includes non-English speaking Caribbean

ANNEX I

TABLE II

Nutrition Status - Central America

	<u>% Children below 75% Weight for Age</u>	<u>% of Minimum Daily Calorie Requirement available (1978)</u>
Belize	13 (1978)	N/A
Costa Rica	8.6 (1978)	114
El Salvador	22.6 (1977)	94
Guatemala	30.5 (1977)	92
Honduras	31.0 (1966)	93
Nicaragua	15.0 (1966)	110
Panama	15.8 (1980)	104

* The calorie deficient population (malnourished) will be significant if calorie availability does not exceed minimum requirements by at least 20%. Using this criteria (availability = 120% requirement) all countries in Central America have calorie deficient groups (geographically, by income, and/or by age in their significant populations).

ANNEX I

TABLE III

Number of deaths from diarrheal diseases in children under 5 years of age, with rates per 100,000 population, by subregion, around 1970 and 1979

Subregion	Year	Under 1 year		1-4 years	
		Number	Rate (a)	Number	Rate
Northern America	1979	795	21.9	73	0.5
	1970	972	25.1	237	1.5
Latin America	1979	422	914.6	307	125.7
	1970	362	1 344.6	665	238.9
Caribbean	1979	412	594.7	418	35.1
	1970	259	787.9	771	93.9
Continental Middle America	1979	005	1 208.1	072	148.1
	1970	879	1 727.0	874	309.0
Temperate South America	1979	630	403.5	520	37.2
	1970	668	1 028.6	139	35.0
Tropical South America	1979	375	789.7	297	123.3
	1970	556	802.2	862	273.1

(a) Per 1,000 live births.

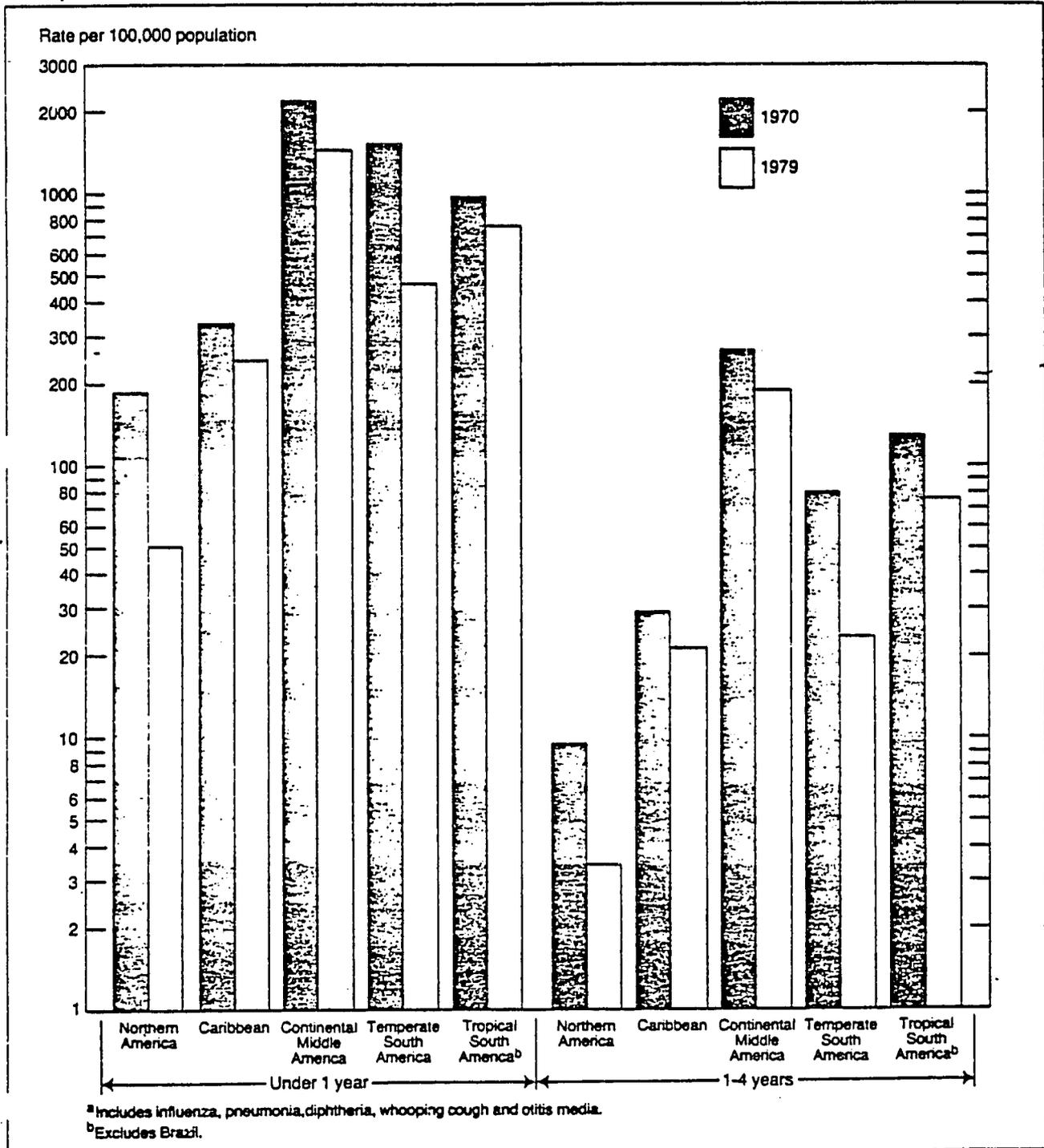
BEST AVAILABLE DOCUMENT

Source: Health Conditions in the Americas, 1980. PAHO

FIGURE I

BEST AVAILABLE DOCUMENT

Figure 48. Death rates from acute respiratory infections^a in children under 1 year and 1-4 years of age in the Americas, by subregion, around 1970 and 1979.



ANNEX II

Donor Financed Health Activities Central America

BELIZE

As a recently independent country, Belize has not received significant external donor support except through Caribbean regional programs of Great Britian, the U.S. Government and the Pan American Health Organization (PAHO).

PAHO (WHO)	<u>1982-1983</u>
Health Infrastructure	\$243,400
Health Care and Sanitation	119,500
Disease Prevention and Control	<u>49,300</u>
TOTAL	\$412,200

Costa Rica (continued)

UNICEF

Annual Expenditures

	<u>1976-80 (av.)</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>
Child Health	\$19,000	67,000	110,000	---
Child Nutrition	14,000	---	18,000	10,000
Water Supply	<u>---</u>	<u>2,000</u>	<u>---</u>	<u>---</u>
TOTAL	\$33,000	69,000	128,000	10,000

UNFPA

	<u>1979</u>	<u>1980</u>	<u>1981</u>
Family Planning Demography Study	504,259	106,306	72,800

PAHO (WHO)

	<u>1982-1983</u>
Health System Infranstructure	\$1,368,766
Health Care and Sanitation	324,086
Disease Prevention and Control (Disease Vector, Malaria)	<u>6,265</u>
TOTAL	\$1,699,117

EL SALVADOR

Funds provided through the Agency for International Development (AID) represent the largest source of external assistance in the health sector. In FY 1981, AID provided \$9.1 million in PL-480 Title II funds for maternal/child feeding programs, and \$7.1 million in 1982. In addition, grants to PVO's such as Save the Children and La Leche League totaled just over one-half million dollars for FYs 1981 and 1982. For FYs 1983 and 1984, AID will extend \$25 million for purchase of critically needed medicines and supplies, support of emergency medicine and malaria control activities and for training and management systems developed in the health sector. The IDB and IBRD have not extended assistance to El Salvador since 1980. PAHO, however, has provided technical assistance in sanitation and vector control activities, as well as disease prevention and control efforts. The support totaled \$2,063,753 for FYs 1982 and 1983.

AID

	<u>Total</u>
1978 Nutrition Improvement (1978-82)	\$ 471,000
1980 Health and Nutrition	276,000
1981-1983 Family Planning	8,713,000
1979 Rural Potable Water	390,000
1980 Health and Nutrition	1,100,000
1983 Health Systems Vitalization	25,000,000

El Salvador (continued)

UNICEF	<u>1981</u>
Child Health	\$ 62,000
Water Supply	24,000
Child Nutrition	<u>66,000</u>
TOTAL	\$132,000
PAHO (WHO)	<u>1982-83</u>
Health System Infrastructure	1,522,800
Health Promotion and Care	400,553
Disease Prevention and Control	<u>140,400</u>
TOTAL	\$2,063,753
IBRD	No activities since FY 1980
UNDP, PAHO	
Rural Basic Sanitation, 1979-1983	\$399,415,000

GUATEMALA

The U.S. and IDB were the primary external sources of financing for health projects from 1978-1983. IDB provided \$73.5 million in loans for the health sector during this time period. Of a total \$71 million in developmental assistance provided by the U.S. for this same period, \$19,4 million (or 27% of total commitments) went to support health projects. In this figure are included the commodities donated under PL-480, Title II, for maternal/child feeding and Food for Work programs.

In addition, the IDB provided a loan in 1977 of \$35.5 million for water and sewer construction in Guatemala City and has plans for a possible loan of \$18 million in 1983 for a water supply project in three intermediate cities. Japan has also provided concessional financing for development activities in health. Grant funding of \$1,826,000 was provided by Japan for a water project in 1979. Germany (FRG) had provided concessional loans for hospitals in 1976 and 1977, but provided no additional funds for health between 1978 and 1981. Norway made a small grant for water supply in 1977, while UNICEF and UNFPA continued modest grant programs during the same period. It appears that the government of Guatemala has established clear priority for assigning external assistance to the health sector. However, opportunities to work in the sector are

Guatemala (continued)

constrained by a number of factors. For instance, external assistance, even on concessional terms, carries the burden of recurring costs. The uneven economic performance of the Guatemalan economy, and limited, often unsteady revenues accruing to the Ministry of Health, serve to constrain the government's absorptive capacity. AID monies in the form of PL-480 peaked at \$7.5 million in 1981 and were reduced to \$5 million dollar level in FY 1983. In 1980, an IDB loan package for \$51 million was signed to support urban health services. The government, however, has had difficulty in supporting the large recurrent costs resulting from major construction of hospitals, clinics, and other capital intensive investments. This has led to understaffed; underbudgeted and underutilized facilities, and an increasing awareness on the part of government authorities to provide for sources of revenue to cover recurrent costs.

	Grant (G)	Loan (L)
	<u>\$ Thousands</u>	
IDB		
1980 Health Services Urban		\$51,000 (L)
1982 Water Supply IV Rural		15,000 (L)
1983 Water Supply Expansion Xaya-Pixcaya		18,000 (L)
AID		
1980 Community Based Health Services	5,000 (L)	
	800 (G)	
1980-1983 Family Planning Nationwide	2,376 (G)	
1983 Family Planning Expansion, 1983-1987	8,611 (G)	

Guatemala (continued)

<u>'L-480: Nutrition, Child Feeding</u>	<u>Voluntary Agencies</u>	<u>World Food Program</u>	<u>Total</u>
1980	\$3,523	153	\$3,676
1981	7,210	344	7,554
1982	5,228	776	6,000
1983 Proposed	4,087	922	5,009

<u>UNICEF</u>	<u>Estimated Expenditures</u>			
	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>
Child Health	60	75	150	150
Water Supply	374	384	490	560
Child Nutrition	<u>3</u>	<u>0</u>	<u>0</u>	<u>0</u>
TOTAL	437	459	640	710

<u>UNFPA</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>
Population/Demography	66,478	13,349		
MCH/Family Planning				64,041
JAPAN 1979 Water Supply				1,826 (G)
NORWAY 1977 Water and Sewer, Patzon				139 (G)

PAHO

Health System Infrastructure	\$1,119.3
Health Promotion and Care	1,125.4
Disease Prevention and Control (Malaria)	<u>205.4</u>
TOTAL	\$2,441.1 (G)

PANAMA

As of 1981, the IBRD and the IDB provided the largest share of health sector assistance to Panama. In recent years their support has been restricted to water supply and sanitation as opposed to the hospital and clinic construction activities supported by these lending institutions in other Central American countries. The expanded access to safe water and sanitation is, in fact, responsible for the significant improvement in health status in Panama, particularly the reduction in the incidence (and mortality from) of diarrheal diseases. AID's health sector support also emphasized water and sanitation, but at the village level, using simple technologies (gravity flow systems, handpumps, etc.) to bring water to dispersed and inaccessible communities.

IBD	1981: Water Supply for Rural Communities	\$26,000,000
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IBRD

1976: Water and Sewage I	\$12,000,000
1983: Water and Sewage II	\$21,000,000

USAID

1977-1982: Rural Health Delivery System Programming in the Health and Nutrition Sectors Ended in FY 1982.	\$ 9,500,000
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Panama (continued)

<u>UNICEF</u>	<u>1981</u>
Child Health	\$ 4,000
Water Supply	44,000
Child Nutrition	<u>46,000</u>
TOTAL	\$94,000
<u>PAHO (WHO)</u>	<u>1982-1983</u>
Health System Infrastructure	\$ 830,608
Health Promotion and Care	631,779
Disease Prevention and Control	<u>16,800</u>
TOTAL	\$1,479,187

NICARAGUA

Beginning in 1981, no further bilateral assistance from the U.S. was authorized, and in FY 1982, all assistance was halted. At the present time, Cuba and the Soviet Union support the extension of health services in Nicaragua. Estimates on the number of Cuban physicians are in the range of three to five thousand. Due to government support, and abundant external manpower, it is estimated by PAHO that the great majority of Nicaraguans are now receiving immunizations, primary and clinical health care at government service centers for either no or very low cost. However, reliable estimates of the cost and extent of foreign assistance are not available at this time. UNICEF and PAHO continue to offer a moderate amount of grant assistance to Nicaragua.

UNICEF	<u>1981</u>
Child Health	\$304,000
Water Supply	72,000
Child Nutrition	<u>62,000</u>
TOTAL	\$438,000

AID

During FY 1982 no new assistance was authorized. Funds for FY 1983 had been earmarked but were not spent.

Nicaragua (continued)

AID developed assistance in health has provided support for:

<u>Title</u>	<u>Year Approved</u>	<u>Total</u>
Rural Health Services	1976	\$5,000,000 (L)
PVO's Health	1977	723,000 (G)
Nutrition Development	1978	3,000 (L)
		500 (G)
<u>PAHO</u>		<u>1982-1983</u>
Health System Infrastructure		\$966,394
Health Care and Sanitation		478,605
Disease Prevention and Control		196,749

HONDURAS

During the period 1978-1983, Honduras received substantial concessional assistance from both bilateral and multilateral sources. At the beginning of this period, multilateral assistance exceeded bilateral. From 1978-1981, total external assistance for the health sector, \$44,250,000, or approximately \$11 million a year. This total represented about 9% of all donor assistance. The United States, the largest single donor, provided \$29,366,000 for health projects, and approximately \$3 million a year in food commodities for maternal/child feeding programs. The IDB provided \$7,300,000 for health, a rural water supply project signed in 1979, out of a total of \$172 million during the 1978-1982 period. The EEC grant commitment of \$4,383,000 for rural water and sanitation signed in 1979, represents the largest EEC commitment for health that has been recorded to date for any PAHO member country. UNICEF has provided grant assistance at an average level of \$350 thousand in FYs 1982 and 1983. The IDB has under consideration a number of concessional loans which would support water supply and sewer projects in three medium cities, and rural development of water and sanitation. However, uncertainties in the flow of government of Honduras' revenues and past performance in an early 1970's hospital construction loan have impeded going forward with the loans. Among other multilateral donors, a UNDP grant of \$350,000 was provided to refurbish 200 local

Honduras (continued)

UNFPA

Child Health/Family Plng.	1981	600,820
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UNDP

Refurbishing Health Posts		350,000
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PAHO

Technical Assistance	1982	3,865,290
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*An additional \$10,000,000 will be approved for this activity
in FY 1983

Source: Pan American Health Organization
Resource Mobilization Unit