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CHILD SURVIVAL BASELINE

1986

FOR

CENTRAL AMERICA AND PANAMA

AGENCY FOR INTERNATIONAL DEVELOPMENT
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CHILD SURVIVAL BASELINE, 1985

Background

Nearly twenty-six million people live in Central America and Panama. Over four million of these individuals - seventeen percent of the population - are children under five years of age. In 1985, nearly fifteen thousand of these children died from diarrheal diseases alone. Diphtheria, pneumonia and whooping cough, now nearly erradicated in the industrialized world, still kill hundreds of young children in Central America each year, and diseases such as measles, which the industrialized world considers benign, reach epidemic proportions in Central America and are counted among the most serious causes of childhood death.

In an unprecedented response to this situation, virtually all organizations working in international health have joined hands in a concerted effort to lower rates of childhood mortality worldwide. USAID, UNICEF, the Pan American Health Organization/World Health Organization, the Italian government, Rotary International, the Nutrition Institute of Central America and Panama (INCAP) and scores of other organizations are contributing massive support to both private and public health sectors in Central America in what has come to be called the "Child Survival Program". The program has eight major components: immunizations, infant and child feeding, lactation, growth monitoring, pregnancy and low birth weight, nutrition, respiratory infections, and diarrheal disease. Oral rehydration therapy(ORT), represented primarily by treatment of diarrheal-caused dehydration with oral rehydrations salts (ORS) is the principal component of the focus on diarrheal disease.

Each country in Central America has set it's own Child Survival goals. By the year 1990, in three year's time, countries hope to have lowered infant and child mortality rates dramatically, increased the percentage of women who breastfeed, reduced the percentage of children born with low birthweight, and have drastically reduced the number of deaths caused by dehydration, diarrhea, respiratory diseases and diseases that are preventable by vaccines.

In order to monitor and evaluate the progress and impact of the Child Survival Program in Central America, each country has decided to either rely on Ministry of Health health information systems already in place or to put into effect special information systems designed to supplement those of the Ministries of Health. These special information systems are for the most part designed around a "centinel area" concept, in which certain areas or towns are regularly studied on Child Survival topics. The results of the studies are then used to indicate project progress nation-wide. The centinel area surveys are supplemented by anthropological case studies and special surveys of health providers and the maternal-child health system which provide a more in-depth understanding of Child Survival in each country.

In September, 1986, the U.S. Agency for International Development's Regional Office of Central American Programs (USAID/ROCAP) decided to gather data on Child Survival topics from all countries in Central America. The purpose of this data collection was three-fold: 1) to formulate a Baseline on Child Survival which could be used in program evaluation, 2) to evaluate each country's information system and it's capacity to evaluate and monitor Child Survival activities, and 3) to aid Washington in defining appropriate Child Survival tracking system indicators.

The report presented here is a result of a data collection effort which took place from October, 1986 through February, 1987 in Guatemala, Honduras, El Salvador, Costa Rica, Panama and Belize. Baseline data for Nicaragua is currently being collected by INCAP and will be published later as an addendum to this report. Child Survival indicators used to formulate this Baseline were taken from three sources: 1) those outlined in the "Working Paper: Reporting System for AID's Child Survival Action Plan" (Sept., 1985) developed in Washington which covered the major Child Survival topics of Oral Rehydration Therapy (ORT), Immunization, Nutrition and High Risk and were divided by complexity into Tiers I through III, 2) the final list of Tier I indicators for these same topics sent by Washington to ROCAP in September, 1985, - "Health and Child Survival Project Reporting, Tables 1-1, 2-1, 3-1, 4-1, 5-1" and 3) ROCAP program indicators taken from the project paper, "Oral Rehydration Therapy, Growth Monitoring and Education" (596-0115). The Baseline year is calendar, 1985

The first part of this report contains nine summary tables for Tiers I, II, and III and ROCAP Project indicators. These tables present the 1985 Child Survival Baseline using the indicators listed in the documents discussed above. All information cited in the summary tables can be assumed to reflect national-level data unless otherwise specified. The text of the report provides an analysis of country abilities to answer all Tier and ROCAP indicators, and a discussion of the problems encountered by most countries in providing specific information about ORT, immunization and nutrition.

The annexes contain detail on all information available for each country for all Tier and ROCAP indicators as well as other information related to ORT, immunization and nutrition topics. The detail presented in these annexes provides a thorough look at each country's Child Survival baseline for 1985 and each country's ability to monitor and evaluate Child Survival activities.

Child Survival Baseline, 1985

Tier I

The status of Tier I demographic indicators for each of the six countries studied and for the sub-region is summarized in Table 1-1. All six countries were able to answer most of these questions with the exception of 1-1.2, no. of children by age, 1-1.4, no. of live births, and 1-1.5, annual number of child deaths by age group. Countries were able to give the total number of infants and the total number of children 12-59 mos., but had not broken down the latter into year increments. Nor did most Ministries of Health report live births or deaths in each age group.

Tier I indicators for oral rehydration projects are summarized in Table 2-1. Country information systems were much less complete on the subject of ORT; only two indicators out of eight were answered completely in every country (2-1.3, the cost per packet to the consumer, and 2-1.5, the number of health facilities or distribution points for ORT/ORS in the area). Although the number of ORS packets imported and locally produced by the public health sector (2.1-1) was relatively easy to obtain, very little data was available

TABLE I-I

CURRENT DEMOGRAPHIC AND OTHER ESTIMATES FOR PROJECT AREA

ITEM NUMBER	INDICATOR	COUNTRY						COMMENTS/SOURCES
		Guatemala	El Salvador	Honduras	Panama	Costa Rica	Belize	
I-I.1	Total Population in project area:	(1985) 8.2 million	(1985) 5 million	(1985) 4.4 million	(1984) 2.1 million	(1985) 2.6 million	(1985) 166,213	Population projections, Departments of Statistics and planning (for 1985 mid-year)
I-I.2	No. of Children by Age:	(1985)	(1985)	(1985)	(1985)	(1985)	(1985)	Guatemala: MSPAS, INCAP El Salvador: MIPLAN Honduras: CONSUPLANE Panama: Direc. de Estad. y Censo Costa Rica: MS Belize: MOH, Central Statistics *12-59 mo. figures from 1983 (Pan.)
	0-12 months	340,097	183,011	169,918	57,537	74,856	5,943	
	12-59 months	1,143,219	652,168	630,851	221,347*	289,496	21,808	
	12-23	not avail.	not avail.	165,036	55,944	74,336	not avail.	
	24-35	"	"	160,147	55,483	73,299	"	
	36-47	"	"	155,265	55,112	71,833	"	
	48-59	"	"	150,403	54,808	70,028	"	
I-I.3	No. of Women of Reproductive Age by: Age Group:	(1985)	(1985)	(1985)	(1985)	(1985)	(1985)	Guatemala: MSPAS, CELADE El Salvador: CELADE Honduras: CONSUPLANE Panama: MS/Direcc. de Estad. y Censo Costa Rica: MS Belize: Central Stat. Office
	TOTAL 15-49	1,737,474	1,243,681	952,751	526,943	665,277	34,831	
	15-19	414,811	294,983	237,096	120,015	139,473	9,472	
	20-24	345,210	252,113	192,591	104,188	136,091	7,580	
	25-29	280,908	209,959	154,050	87,163	118,985	5,781	
	30-34	235,243	165,980	123,664	70,685	95,038	4,203	
	35-39	182,805	129,546	96,113	58,504	72,632	3,108	
	40-44	149,551	105,049	80,760	47,716	56,304	2,438	
	45-49	128,946	86,051	68,477	38,672	46,754	2,249	

ITEM NUMBER	INDICATOR	COUNTRY: Guatemala	El Salvador	Honduras	Panama	Costa Rica	Belize	COMMENTS/SOURCES
1.1.4	Annual Number of Live Births	(1985) 303,687	(1985)* 150,000	(1985)** 180,764	(1985) 57,535	(1984) not avail.	(1985) 6,094	Guatemala: MSPAS El Salvador: MSPAS Honduras: MSH Panama: DG de Estadisticas y Censos Costa Rica: - Belize: Ministry of Health * These are total birth estimates only. Live births not available ** Estimate based on infant pop. and inf. mortality data (1985)
1-1.5	Annual Number of Infant and Child Deaths by Age Group:	(1985)			(1985)	(1984)	(1985)	Guatemala: MSPAS,USAID Panama: MS Costa Rica: MS,CCSS Belize: Ministry of Health
	Total 0-12 months	71,272	not avail.	not avail.	1,244	1,440	131	
	Total 12-59	not avail.	"	"	not avail.	201	31	
	12-23	"	"	"	"	68	not avail.	
	24-35	"	"	"	"	47	"	
	36-47	"	"	"	"	36	"	
	48-59	"	"	"	"	30	"	
	Other Data Avail.:							
	Infant Mortality Rate: (Per 1000 live births)	(1985) 68.5/1,000	(1985) 67.7/1,000	(1980's) 71-85/1,000	(1985) 26.9/1,000	(1985) 16.2/1,000	(1985) 21.4/1,000	Guatemala: MSPAS El Salvador: USAID/ES and World Bank Honduras: MSP Panama: MS,Bureau for LA and the Carib. Belize: Ministry of Health

ITEM NUMBER	INDICATOR	COUNTRY Guatemala	El Salvador	Honduras	Panama	Costa Rica	SUB-REGION Belize	COMMENTS/SOURCES
	Child (12-59 months) Mortality Rate: (Per 1000 children)	(1983) 15.5/1,000	(1981) 6.8/1,000	(1983)* 7.4/1,000	(1985) 1.0/1,000	(1983-4) 1.0/1,000	(1985) 1.4/1,000	Costa Rica: MS, Bureau for LA and the Caribbean, Assoc. Demog. Costarricense Belize: Ministry of Health * Under-reporting suspected
1-1.6	Number of Health Workers in Project Area:	(1985)*	(1985)*	(1985)**	(1984)	(1985)	(1984)	Guatemala: MSPAS El Salvador: MSPAS Honduras: MSP Panama: MS, CSS Costa Rica: PAHO Belize: Ministry of Health
	. Physicians	1,268	1,531	928	2,364	2,300	128	
	. Other Health Personnel (Non-phys.)	6,106	3,984	3,638	5,029	7,232	560	*Ministry of Health personnel only.
	. Vol/Community Health Workers	(1983) 12,058	3,580	18,869	562	515	128	**Does not include dentists, technicians, or malaria volunteers.
	. Other	--	--	2,686	--	--	--	

ITEM NUMBER	INDICATOR	COUNTRY						COMMENTS/SOURCES
		Guatemala	El Salvador	Honduras	Panama	Costa Rica	Belize	
I-1.7	Number of Government Health Facilities, Serv. Units or Distn. Points in Project Area:	(1983/1985)*	(1985)	(1985)	(1985)	(1985)*	(1985)	Guatemala: MSPAS, IGSS El Salvador: MSPAS,CONADES,CESAD Honduras: MSP Panama: MS,INCAP rep. Costa Rica: MS/CCSS Belize: Ministry of Health * Ministry of Health and Social Security facilities combined.
	. Hospitals	65	14	20	--	36	7	
	. Clinics/health Posts	901	328	614	--	447	28	
	. Other	64	138	---	--	39	--	
	TOTAL	1030	480	634	548	522	35	

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TABLE 2-1

TIER ONE INDICATORS FOR ORAL REHYDRATION PROJECTS

ITEM NUMBER	INDICATOR	COUNTRY: GUATEMALA		EL SALVADOR		HONDURAS		PANAMA		COSTA RICA		BELIZE		COMMENTS/SOURCES
2.1.1	Number of ORS Packets Imported and Locally Produced by the Project by size of Packet:	(1985)		(1985)		(1985)		(1985)		(1985)		(1984)		Guate: USAID/MSP E.S.:MSPAS,CESAD, CONADES,HOPE Hond:MSP/USAID/H Panama: PAHO C.R.:MS/CCSS Belize: MOH
		Liter	Less than Liter	Liter	Less than Liter	Liter	Less than Liter	Liter	Less than Liter	Liter	Less than Liter	Liter	Less than Liter	
	No. Imported	700,000	--	1,630,000	--	2,500,000	--	150,000	--	--	--	47,000	--	
	No. Locally Produced	--	--	29,000	--	500,000	--	none	--	500,000	870,000	--	--	
	Private Sector Production and Dist'n.	Some	--	360,000	621,000	--	--	--	--	--	Some	--	--	
2.1.2	Cost Per Packet to the Project (cost plus transportation)	(1985)		(1985)		(1984)		(1985)		(1985)		(1985)		Guate: USAID/G E.S.: CONADES Hond: MSP/USAID/H Panama: MS,INCAP C.R.: MS/CCSS Belize: MOH
		0.20		0.24		0.12 (imported) 0.16 (local)		0.07		0.03	0.05/6	0.12	--	

ITEM	INDICATOR	GUATEMALA	EL SALVADOR		HONDURAS	PANAMA	COSTA RICA	BELIZE	COMMENTS/SOURCE:
2.1.3	Price per Packet to the Consumer: (Public and PVO) (US$)	-0- ---	-0-	-0-	-0- ---	-0- ---	-0- -0-	- 0 -	Guate: MSPAS, USAID/G E.S.: MS, CONADES Proj. HOPE USAID/ES Hond: MSP/USAID, Panama: MS C.R.: MS/CCSS Belize: MOH
	Private Sector Prices to Consumer (US$)	Not avail.	0.68	0.29	Not. Avail.	Not avail.	Not avail.	Not avail.	
2.1.4	Number of Health Workers in Project Area Trained to teach ORT/ORS by type of worker:		(1985)		(1981-85)	(1985)	(1979-86)		Guate: INCAP, MSP/ E.S.: MSPAS, CESAD, CONADES, P. HOPE Hond: MSP/USAID, Panama:- C.R.: PAHO
			To Be Trained	Actually Trained	Trained		Trained		
	. Physicians	Not avail.	262	299	928	Not avail.	1,282	Not avail.	
	. Other Health Person.		933	596	3,652		1,532		
	. Vol/Community Health Workers	"	1284	1066	26,403	"	265	"	
	. Other	"	100	295	-	"	246	"	

ITEM	INDICATOR	GUATEMALA	EL SALVADOR	HONDURAS	PANAMA	COSTA RICA	BELIZE	COMMENTS/SOURCES
	Other Data: Efficiency Level of Personnel Training:	(1985) 67% - Centers 22-29% - Posts						
2.1.5	Number of Govt. Health Facilities, Service Units or Dist'n Pts. for ORT/ORS in Service Area:	(1985)* 1,030	(1985) 480	(1985)** 634	(1984) 548	(1985)* 787	(1985) 35	Guate.: MSPAS, IGSS E.S.: MCP, CESAD, CONADES Hond: MSF Panama: MS, INCAP C.R.: MS, CCSS Belize: MOH *Ministry of Health and Social Security facil. (G., C.R.) plus vol. workers (C.R.) **Does not inclu. midwives and hlth. guardians

ITEM	INDICATOR	GUATEMALA	EL SALVADOR	HONDURAS	PANAMA	COSTA RICA	BELIZE	COMMENTS/SOURCES
2.1.6	Number of Health Facilities, service units or dist'n pts. participating in project activities to provide ORS:	(1985)	(1985)	(1985)**	(1984)	(1985)*	(1985)	Guate.: MSPAS, IGSS E.S.:MSPAS,P.HOPE CONADES,CESAD HOND.:MSP Panama:MS,INCAP C.R.:MS,CCSS Belize: MOH *Pharmacies(C.R.) **Does not inclu. midwives and hlth guardians.
	. Public	1,030	480	634	548	787	35	
	. Private	Not avail.	74	Not avail.	Not avail.	157*	Not avail.	
2.1.7	Number and type of Health facilities, Service units, or Dist'n pts in project area w/ an appropriate number of, but no fewer than 10, ORS packets in inventory:			(1985)*				Hond:MSP,MSH,USAI *Rural hlth. post only
	. Public		Not avail.	98.6%	"	Not Avail.	Not Avail.	
	. Private		"	Not avail.	"	"		

ITEM	INDICATOR	GUATEMALA	EL SALVADOR	HONDURAS	PANAMA	COSTA RICA	BELIZE	COMMENTS/SOURCES
2.1.8	Same as above w/ ORS packets and a trained person available.			(1985)*				*Rural health posts only
	. Public	"	"	80%	"	Not Avail.	Not Avail.	
	. Private	"	"	Not avail.	"	"	"	
	Other Data Avail.	(1985)			(1985)			
	Efficiency of logistics:	58-67% Centers and posts			69% Centers 46% Posts			Guate.: MSPAS, INCAP Pan: MS Belize: MOH
	Efficiency of training:	68% centers 29-22% posts						
	Efficiency of Staffing:				72% Centers 73% Posts			

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on private sector production, and cost per packet data was also only partial (2-1.2). There was very little information available on the number of health facilities providing ORS in the private sector (2-1.6), although pharmacies are involved in the Child Survival project in the sub-region. Health worker training in ORT (2-1.4) was available for three out of six of the countries. Only one out of six had any information on number of health facilities with ORS packets in supply (2-1.7) and a trained person available (2-1.8). The detailed information requested in these last two questions (2-1.7 and 8) requires special systems analysis. Systems efficiency surveys were completed in Guatemala and Panama and estimates of the efficiency of training, equipment and supplies in Maternal-Child Health are available, but the data gathered was not disaggregated in order to answer questions 2-1.7 and 2-1.8.

Tier I indicators for immunization projects are summarized in Table 3-1. These were even more difficult to answer than those listed for oral rehydration above. All countries were only able to completely answer one out of the seven questions in this table (3-1.2, user fees charged for immunizations). The first question (3-1.1) regarding number of vaccines procured by the project was answered in Panama, Belize and Guatemala. The rest of the countries provided only the number of doses of each vaccine actually applied. Training (3-1.3) data, again, was only available for four out of the six countries, and the data available was only partial in the case of El Salvador. Information was available in all countries on the number of health facilities capable of providing immunizations (3-1.4) and participating in providing immunizations (3-1.5) in the public sector, but again, information on the private sector was lacking in most cases. As with the last two indicators requested for oral rehydration in Table 1-2, the last two indicators requested for immunizations (3-1.6 and 7) require a system's survey. Four of the six countries studied had conducted such surveys. Those countries implementing efficiency studies in their Maternal-Child Health systems provided information on the percent efficiency of training, supplies and equipment in general, but had not disaggregated the data in order to be able to answer specific questions about supply of vaccines or quality of the cold chain.

Tier I indicators for nutrition projects are summarized in Table 4-1. None of the five questions were answered by all of the countries studied. The

TABLE 3-1

TIER ONE INDICATORS FOR IMMUNIZATION PROJECTS

ITEM NUMBER	INDICATOR	COUNTRY						COMMENTS/SOURCES
		Guatemala	El Salvador	Honduras	Panama	Costa Rica	Belize	
		(1985)	(1985)*	(1985)*	(1985)	(1985)*	(1985)	Guatemala: MSPAS
3-1.1	Number of vaccines procured by the project by type:							El Salvador: MSPAS Honduras: MSP Panama: MS Costa Rica: MS/CCSS
	Measles	300,000	311,678	187,409	300,000	66,544	7,700	Belize: PAHO
	Polio	1,000,000	999,596	943,279	350,000	308,893	30,500	*Doses applied
	DPT	1,000,000	963,606	700,800	350,000	315,086	31,000	
	BCG	150,000	160,599	244,037	400,000	140,241	7,000	
3.1.2	User fees charged for Immunizations	NO	NO	NO	NO	NO	NO	Guatemala: MSPAS El Salvador: MSPAS Honduras: MSP Panama: MS Costa Rica: MS/CCSS Belize: PH Nursing Service

ITEM NUMBER	INDICATOR	COUNTRY: Guatemala		El Salvador	Honduras	Panama		Costa Rica	Belize	COMMENTS/SOURCES
3.1.3	Number of health workers in project area to be trained and actually trained to teach about or give immunizations:	(1985)		(1985)	(1985)	(1985)				Guatemala: USAID,MSPAS El Salvador: UNICEF/MSPAS, P.Hope Honduras: MSP Panama: MS,INCAP rep. Costa Rica: - Belize: - *Ministry of Health personnel
		To be Trained	* Trained	Trained	Trained	To be Trained	* Trained			
	Physicians	80	80	3		120	40	Not avail.	Not avail.	
	Other Health Pers.	675	675	60		120	40	"	"	
	Vol.Commu. Health Worker	4648	3951	5,041		300	300	"	"	
	Other	-	-		.	500	500	"	"	
					10,000*					
	Other Data Available:	(1985)								
	Efficiency level of Personnel Training:	69% - Centers 29-22% - Posts								
3.1.4	Number and Type of Health Facilities, Service Units or Dist'n Pts. capable of providing immunization:	(1985)		(1985)	(1985)	(1985)		(1985)	(1985)	Guatemala: MSPAS El Salvador: MSPAS,UNICEF Honduras: MSP Panama: MS,INCAP rep. Costa Rica: MS/CCSS * Inclu. vaccin. posts (E.S.) (G) ** Medical Clinics (C.R.) ***Private Pediatricians (Pan.)
	Public	6,924*		2,627*	634	548		522	35	
	Private	Not Avail.		Not Avail.	Not Avail.	120***		120**	Not avail.	

ITEM NUMBER	INDICATOR	COUNTRY: Guatemala	El Salvador	Honduras	Panama	Costa Rica	Belize	COMMENTS/SOURCES
3.1.5	Number and Type of Health Facilities, Service Units or Dist'n Pts. participating in providing Immunization.	(1985)*	(1985)	(1985)	(1985)	(1985)	(1985)	Guatemala: MSPAS El Salvador: MSPAS, P.Hope,UNICEF Honduras: MSP Panama: MS,INCAP rep. Costa Rica: MS/CCSS Belize: MOH *Inclu. vaccin. posts (E.S.)(G) **Medical clinics (C.R.) ***Private Pediatricians (Pan.)
	Public	6,924*	2,627*	634	548	522	35	
	Private	Not Avail.	74	Not Avail.	120***	120**	Not avail.	
3.1.6	Number and Type of Same w/vaccines, In Inventory		(1985)	(1985)*				Guatemala: INCAP,MSPAS El Salvador: P. Hope, MSPAS Honduras: MSP,USAID,MSH Panama: MS Costa Rica: - *Rural health posts
	Measles							
	Public	Not Avail.	Not Avail.	77.1%	Not Avail.	Not Avail.	Not Avail.	
	Private	"	16	Not Avail.	"	"	"	
	Polio							
	Public	Not Avail.	Not Avail.	77.1%	Not Avail.	Not Avail.	Not Avail.	
	Private	"	16	Not Avail.	"	"	"	
	DPT							
	Public	Not Avail.	Not Avail.	75.7%	Not Avail.	Not Avail.	Not Avail.	
	Private	"	16	Not avail.	"	"	"	

ITEM NUMBER	INDICATOR	COUNTRY Guatemala	El Salvador	Honduras	Panama	Costa Rica	Belize	COMMENTS/SOURCES
	BCG							
	Public	Not Avail.	Not Avail.	58.6%	Not Avail.	Not Avail.	Not Avail.	
	Private	"	"	Not avail.	"	"	"	
	Other Data:	(1985)			(1985)			
	Efficiency of Logistics:	58-67% (centers and posts)			69% Centers 46% Posts			
3.1.7	Number of health facilities, service units, or dist'n. pts. w/an operating cold chain (public sector)	(1985)		(1984)*	(1984)		(1985)	Hond.: MSP Guate.: UNICEF Pan.: MS Belize: PH Nursing Serv. *First trimester, 1934
		69%	Not Avail.	78%	52%	Not Avail.	94%	
	Other Data Available:	(1985)			(1985)			
	Efficiency level of equipment in health centers and posts	60%			84% Centers 55% Posts			

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TABLE 4-1
TIER ONE INDICATORS FOR NUTRITION PROJECTS

ITEM NUMBER	INDICATOR	COUNTRY: Guatemala	El Salvador	Honduras	Panama	Costa Rica	Belize	COMMENTS/SOURCES
4.1.1	Number of health workers to be trained and actually trained in infant and child feeding:	(1985)	(1985)	(1985)*				Guatemala: INCAP, MSPAS El Salvador: INCAP, CONADES, P. Hope Honduras: MSP, PROALMA Panama: - Costa Rica: -
		Trained	Trained	Trained				
	Physicians		7	197				*Primarily in breastfeeding (Hond.)
	Other Health Pers.		23	169				
	Vol.Commu. Health Workers		122	264				
	Other		45	252				
	TOTAL	25	197	882	Not Avail.	Not Avail.	Not. Avail.	
	Other Data Avail: Efficiency level of Training of personnel:	(1985) 67% - Centers 22-29% - Posts						

ITEM NUMBER	INDICATOR	COUNTRY: Guatemala	El Salvador	Honduras	Panama	Costa Rica	Belize	COMMENTS/SOURCES
4.1.2	Number of health workers to be trained and actually trained in growth monitoring:	(1985)	(1985)	(1985)	(1985)	(1985)		Guatemala: INCAP,MSPAS El Salvador: INCAP, CONADES, P. Hope Honduras: INCAP/MSP Panama: INCAP/MS Costa Rica: INCAP/MS
		Trained	Trained	Trained	Trained	Trained		
	Physicians		7					
	Other Health Pers.		23					
	Vol.Commu. Health Workers		-					
	Other		10					
	TOTAL	10	40	13	120	10	Not avail.	
	Other Data Available:	(1985)						
	Efficiency level of training of personnel:	67% - Centers 22-29% - Posts						
4.1.3	Number and type of health facilities, serv. units. or dist'n. pts. w/ operating scales:							
	Public	Not avail.	Not avail.	Not. avail.	Not avail.	Not avail.	Not avail.	Guatemala: INCAP,MSPAS El Salvador: - Honduras: - Panama: MS Costa Rica: -
	Private	"	"	"	"	"	"	

ITEM NUMBER	INDICATOR	COUNTRY						COMMENTS/SOURCES
		Guatemala	El Salvador	Honduras	Panama	Costa Rica	Belize	
	Other Data Available: Efficiency of logistics/equip.	(1985) 58-69% (Centers & Posts)			(1985) 84% Cent. 55% Posts			
4.1.4	Number of mothers/ mother subs. given nutrition counseling:	Not avail.	(1985) 761	Not avail.	Not avail.	(1985)* 13,764	Not avail.	Guatemala: MSPAS, INCAP El Salvador: P. Hope, CONADES Honduras: - Panama: - Costa Rica: MS *First quarter, 1985 only (C.R.)
	Other data Available: Efficiency in community education:	(1985) 55-63%						
4.1.5	Number of children under age five enrolled in growth monitoring programs	Not avail.	Not avail.	Not avail.	Not avail.	Not avail.*	Not avail.	Guatemala: MSPAS/INCAP (1985-85)
	Other Data Available: Percent of children enrolled in growth monitoring programs:	(1985) 27.4%** (0-36 mos.)			(1983) 78.5% (0-11 mos.) 51.8% (12-59 mos.)			El Salvador: - Honduras: - Panama: MS Costa Rica: - *1987 goal for Costa Rica is 180,800 children under 5 (10% of the under 5 pop'n). ** rural areas

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first and second questions involving number of personnel trained in infant/child feeding and growth monitoring (4-1.1 and 2) were answered only partially by five of the six countries. As with ORT and immunization, training data had simply not been collected on a systematic basis by the Ministries of Health, though training did take place in most countries in 1985. Nor were Ministries able to answer question 4-1.4, number of mothers receiving nutrition counseling, even though community-level education also took place. Indicator number 4-1.3, the number of health facilities with operating scales, is an indicator which requires a special system's study. Again, in those countries in which an efficiency survey of the Maternal-Child Health system was completed, data was available on the percent efficiency of equipment as well as personnel training, but data was not disaggregated in order to be able to answer specific questions about community education or scales. Although none of the Ministries was able to provide the number of children under five enrolled in growth monitoring (4-1.5), several were able to provide information on the percent of children in various age groups who were enrolled.

Tier I indicators for high risk birth projects are summarized in Table 5-1. Questions 5-1.1 and 5-1.3-5 concern projects involved in contraception and therefore do not apply to ROCAP Child Survival efforts. Indicator 5-1.2, however, asks the number of health workers trained in high risk births, a subject which does involve ROCAP programs. Only partial information was provided for two countries by INCAP, CONADES and Project Hope.

In summary, of all Tier I indicators, those relating to demographics were answered most completely, with an average of 5 out of the 7 indicators requested. Honduras and Panama answered this section most completely. The immunization indicators were answered nearly as completely, with an average of 4 out of the 7 requested. Panama was able to give the most complete response to these questions. Those indicators relating to oral rehydration were the next most complete, with an average of 4 out of the 8 questions completed by each country. El Salvador was able to answer more of these questions than any other country. Next most complete was the question relating to high risk pregnancies and low birth weight. Only El Salvador and Panama were able to

TABLE 5-1

TIER I INDICATORS FOR HIGH RISK BIRTH PROJECTS

ITEM NUMBER	INDICATOR	COUNTRY: Guatemala	El Salvador	Honduras	Panama	Costa Rica	Belizo	COMMENTS/SOURCES
5-1.1	No. of Contraceptives procured	NOT APPLICABLE						Panama: INCAP Honduras: - El Salvador: CESAD, P.Hope
5-1.2	No. of health workers to be trained and actually trained in high risk births:		(1985)		(1985)			
			Trained		Trained			
	Physicians	Not avail.	7	Not avail.		Not avail.	Not avail.	
	Other Health Personnel	"	65	"		"	"	
	Vol./community Health Workers	"	41	"		"	"	
	Other	"	-	"		"	"	
	TOTAL	"	113	"	45	"	"	
5-1.3 to 5-1.5	Contraceptive distribution points and supply	NOT APPLICABLE						

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answer the indicator requested. Last in completeness were those questions related to nutrition. In this section, an average of 2 out of the 5 questions was answered by each country. El Salvador answered most completely.

The biggest problem areas for all countries lay in age-specific population sizes and deaths, all private sector information (including production and distribution of ORS, prices to the consumer, costs, facilities providing immunizations or ORS), all training data of health workers and of the community, and all of the information which requires a specific system's survey including adequacy of training, scales, and cold chain and of supplies of ORS, and immunizations. Some of the data requested is undoubtedly available at the Ministries of Health, but has not been systematically incorporated into an information system (age-specific data). Other data is available in efficiency studies but would have to be disaggregated and re-analyzed to be of to answer the specific questions asked here (scales, cold chain, ORS and vaccination supplies). In some instances, the data has simply not been collected and so is not available (community and provider training data, private sector information, and system's survey information in some countries). If this data is of importance to country Child Survival programs for evaluation, specific steps must be taken in order to make sure the missing information is collected as baseline before too much time has elapsed.

Tiers I, II, and III

Tier I, II and III indicators for oral rehydration suggested by Washington in the "Working Paper" are summarized in Table 6. The two Tier I indicators not requested as final Tier I indicators above involve the number of individuals in the community taught ORT, and the number of severe cases of dehydration which occurred during the year. As discussed above, training data is difficult to obtain, and so it is not suprising to find only two of the five countries able to answer the first question (1.a). As dehydration is not broken out as a cause of morbidity or mortality in Central American reporting formats, there was also little information on the second Tier I indicator (2.a). Three countries were able to give some figures on dehydration, but one reported only dehydration-associated deaths, and the others reported all cases of dehydration.

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TABLE 6
ORT TIERS I, II AND III

ITEM NUMBER	INDICATOR	COUNTRY: Guatemala	El Salvador	Honduras	Panama	Costa Rica	Belize	COMMENTS/SOURCES
TIER I								
Outputs								
1.a	No. of individuals in the community taught ORT	not avail.	(1985) 5,469	not avail.	not avail.	(1982) 265	not avail.	Guatemala - El Salvador - MSPAS, CESAD, CONADES Honduras - Costa Rica - MS Panama -
Impact								
2.a	No. of severe cases of dehyd./yr.	(1985)** 1,657	(1984)* 18,000	not avail.	not avail.	not avail.	(1985)* 18	Guatemala - MSPAS El Salvador - MSPAS Honduras - Costa Rica - Panama - Belize - MOH, OR Unit *all grades dehyd.(ES)(B) **deaths assoc. w/dehydration (all ages)(G.)
TIER II								
Effectiveness								
1.a	Percent of health workers demonst. ORT knowledge skills	not avail.	not avail.	not avail.	not avail.	(1984) 62-68	not avail.	Guatemala - El Salvador - Honduras - Costa Rica - MS Panama -

ITEM NUMBER	INDICATOR	COUNTRY: Guatemala	El Salvador	Honduras	Panama	Costa Rica	Belize	COMMENTS/SOURCES
1.b	Percent of Indiv. w/knowledge of ORT	not avail.	(1986) 96	not avail.	not avail.	not avail.	(1983) 63.2	Guatemala - El Salvador - MSPAS Honduras - Costa Rica - Panama - Belize - MOH
1.c	Percent of children under 5 ever treated w/ORT	not avail.	(1985) 18*	(1985)** 87*	not avail.	not avail.	not avail.	Guatemala - El Salvador - F.), USAID El Salvador Honduras - MS, UNICEF Costa Rica - Panama - *percent of mothers who have used ORT **four regions
1.d	Percent of children under 5 w/ diarrh. in past 2 weeks who were given ORT	(1985) 3.5*	(1986) 44***	(1984) 17.1****	(1984-5) 4.3	(1984) 78**	(1984) 42.3	Guatemala - MSPAS, INCAP El Salvador - MSPAS, INCAP Honduras - MSP Costa Rica - MS Panama - MS Belize - MOH, PAHO *children under 3, rural **past month ***last cases ****past 3 days
Impact								
2.a	Diarrhea-assoc. mort. rate, children 0-60 mos (per 10,000)	(1983) 72.2	(1984) 15.5	(1984) 11.0	(1985) 5.0	(1984) 2.6	(1985) 11.9	Guatemala - MSPAS El Salvador - MSPAS Honduras - MSP Costa Rica - PAHO Panama - PAHO Belize - Cent. Stat. Office

ITEM NUMBER	INDICATOR	COUNTRY: Guatemala	El Salvador	Honduras	Panama	Costa Rica	Belize	COMMENTS/SOURCES
2.b	Diarrh.-assoc. severe dehyd. rates children 0-60 mos (per 1,000 children)	not avail.	not avail.	not avail.	not avail.	not avail.	not avail.	Guatemala - El Salvador - Honduras - Costa Rica - Panama - Belize -
TIER III								
Effectiveness								
1.a	Cost per episode of diarrhea treated by ORT	not avail.	not avail.	not avail.	not avail.	not avail.	not avail.	
1.b	Cost per death averted by ORT	not avail.	not avail.	not avail.	not avail.	not avail.	not avail.	
Impact								
2.a	Diarrhea-assoc. mortality rate, children 0-12 mos (per 1,000 children)	(1984) 11.3	(1971) 7.5	(1983) 3.5	(1984) 1.1	(1984) 1.0	(1985) 2.0	Panama - MS Costa Rica - MS/CCSS Honduras - MSP El Salvador - MSPAS Guatemala - MSPAS Belize - MOH
2.b	Diarrhea-assoc. morbidity rate, children 0-12 (per 100,000 children)	(1985)* 23,065	not avail.	(1985)* 45,904	(1983)* 106,891	(1985)* 3,019	(1985)* 16,692	Guatemala - MSPAS Panama - MSP Costa Rica - MS/CCSS Honduras - MSP El Salvador - Belize - MOH *Cases seen in public health facilities only

ITEM NUMBER	INDICATOR	COUNTRY: Guatemala	El Salvador	Honduras	Panama	Costa Rica	Belize	COMMENTS/SOURCES
2.c	Diarrhea-assoc. morbidity rate, children 0-60 mos (per 100,000)	(1985)*		(1985)*	(1985)*	(1985)*	(1985)*	Guatemala - MSPAS Honduras - MSP Panama - PAHO Costa Rica - PAHO Belize - Cent. Stat. Off. *Cases seen in public hlth facilities only
		4,267	not avail.	19,731	18,740	4,282	11,513	
2.d	Percent of children under 60 mos with weight/age deficiencies of:	(1978)*	(1978)*	(1966)	(1975)	(1982)**	(1976-79)***	Guatemala - MSPAS, INCAP El Salvador - MSPAS, INCAP Honduras - MSP, INCAP Panama - MS, INCAP Costa Rica - MS/CCSS, INCAP Belize - MOH *Rural areas(G.) ** Children under 6(C.R.) ***Children under 3(B.)
	Grade I	47.8	42.8	43.1	46	30.6	20.7	
	Grade II	26.0	10.0	18.4	18	3.3	5.5	
	Grade III	3.2	0.5	1.3	2	0.3	0.7	
2.e	Percent of children under 60 mos who are below the 3rd percentile weight/age (z scores)	(1985-6)*	(1978)*	(1966)	(1980)	(1982)		Guatemala - MSPAS, INCAP El Salvador -MSPAS, INCAP Honduras - MSP, INCAP Panama - MS, INCAP Costa Rica - MS/CCSS, INCAP Belize - MOH *Children under 3(G.)(B.) **Children under 6(C.R.)
	- 2 s.d.	33.6	15.0	21.0	15.8	6.3**	not avail.	
	- 3 s.d.	-	2.9	7.5	-	-	not avail.	
		(1978)	(1978)	(1966)	(1975)	(1982)	(1976-79)*	
	Grade III	3.2	0.5	1.3	2.0	0.3	0.7	

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All six countries were able to answer only two of the six Tier II indicators relating to oral rehydration: question 1.d, the percent of children under five with diarrhea in the past two weeks who were given ORT, and question 2.a, diarrhea-associated mortality rate in children 0-60 months of age. Indicators 1.a, 1.b, and 1,c pertaining to health worker and community knowledge of ORT and ORT use-rates were answered by one or two out of the five countries. Indicator 2.b, diarrhea-associated severe dehydration rate was unavailable in all countries due to the unavailability of data about dehydration in general.

Only two of the seven Tier III indicators for oral rehydration were answered completely by all countries: indicators 2.a and 2.d, diarrhea-associated morbidity in infants and nutritional status of children under 5. (In the case of Honduras, the nutrition data is very old (1966), however new survey data should be available soon). Indicator 2.e asked for the percent of children under the 3rd percentile weight/age, however the more appropriate indicator (INCAP) is percent of children with Z scores of -2 or -3 standard deviations. Five of the six countries were able to provide information for this indicator. Questions 2.b and 2.c relating to diarrhea-associated morbidity and mortality were each also available in five out of the six countries. Answers to two of the questions asked in Tier III (1.a and 1.b) were not available in any country studied as the total cost of all Child Survival activities in each country would be nearly impossible to obtain. Ministries of Health in the sub-region do not break down their annual expenditures by project, nor do private organizations readily make their expenditures available to an outside organization.

Immunization indicators for Tiers I, II and III are summarized in Table 7. All six countries were able to answer three of the four Tier I indicators in this table: 2.a, 2.b, and 2.c, questions about the number of cases of neonatal tetanus, measles and polio in each country in 1985. The third question (1.a) asked the number of vaccine doses imported or locally produced. Panama, Belize and Guatemala were able to answer this question. Honduras and Costa Rica reported doses applied in 1985 only.

TABLE 7
IMMUNIZATION TIERS I, II AND III

ITEM NUMBER	INDICATOR	COUNTRY: Guatemala	El Salvador	Honduras	Panama	Costa Rica	Belize	COMMENTS/SOURCES
TIER I								
Inputs								
1.a	No. of vaccine doses imported or locally produced	(1985)		(1985)*	(1985)	(1985)*	(1985)	Guatemala - MSPAS El Salvador - Honduras - MSP
	DPT	1,000,000	not avail.	700,000	350,000	315,086	31,000	Panama - MS
	Measles	300,000	not avail.	187,409	300,000	66,584	7,700	Costa Rica - MS/CCSS
	Polio	1,000,000	not avail.	943,279	350,000	308,893	30,500	Belize - MOH,PAHO
	BCG	150,000	not avail.	244,037	400,000	140,241	7,000	*Doses applied
Impact								
2.a	Cases of neonatal tetanus	(1985) 7	(1985) 52	(1985) 17	(1985) 10	(1985) 0	(1985) 0	Guatemala - MSPAS El Salvador - MSPAS
2.b	Cases of measles	2,272	1,413	6,476	1,380*	1	7	Honduras - MSP
2.c	Cases of polio	29	8	4	0	0	0	Panama - MS Costa Rica-MS/CCSS Belize - MOH,PAHO * children under 5
TIER II								
Effectiveness								
1.a	No. of children 0-12 mos. having received:	(1985)*	(1985)*	(1985)*	(1986)*	(1985)	(1985)*	Guatemala - MSPAS El Salvador - MSPAS Honduras - MSP
	Polio 1	110,085	130,942	147,983	47,126	52,899	3,615	Panama - MS
	Polio 3	26,728	43,218	117,870	(polio 1-3)	(polio 1-3)	3,615	Costa Rica - MS/CCSS
	Measles	58,843	57,268	107,162	22,648	1,799	2,969	Belize - MOH
	DPT 1	110,390	262,940	156,077	45,932	54,420	not avail.	*doses applied
	DPT 3	27,345	92,146	119,245	(DPT 1-3)	(DPT 1-3)	3,550	
	BCG	69,093	80,127	132,505	25,825	53,030	4,882	

ITEM NUMBER	INDICATOR	COUNTRY Guatemala	El Salvador	Honduras	Panama	Costa Rica	Belize	COMMENTS/SOURCES
Other data avail:								
1.a	Percent vaccin. coverage of children 0-12 mos.	(1985)		(1984)	(1984-85)	(1985)	(1985)	Guatemala - MSPAS,USAID El Salvador - Honduras - MSP
	Polio	5.0	not avail.	58.0	28.0	75	60	Costa Rica - UNICEF
	Measles	11.0	not avail.	53.0	23.8	81	49	Panama - MS
	DPT	5.0	not avail.	58.0	28.6	75	59	Belize - PAHO
	BCG	41.0	not avail.	65.0	-	85	82	
1.b	Percent of women 15-49 years of age who have received 2 doses of tetanus toxoid	(1985-86)*	(1985)	(1984)*	(1985)	(1985-86)**	(1985)*	Guatemala - MSPAS,INCAP El Salvador - MSPAS Honduras - MSP Panama - MS
		8.2	3.4	21.8	1.0	46.4	66	Costa Rica - Asoc. Demog. Costarricense Belize - MOH *perc. of women during last pregnancy(2 doses)(G,H,B) **perc. of women during last preg.(1,2 doses)(C.R.)
1.c	Measles-assoc. mortality rate, children 0-60 mos (per 10,000 children)	(1983)			(1985)	(1985)	(1985)	Guatemala - MSPAS El Salvador - Honduras - Panama - MS
		13.4	not avail.	not avail.	0.3	0	0	Costa Rica - MS/CCSS Belize - Cent. Reg. Off.
1.d	Neo-natal tetanus assoc. mortality rate, children 0-12 mos (per 10,000)		(1981)		(1985)	(1984)	(1985)	Guatemala - El Salvador -MSPAS Honduras - Panama -MS
		not avail.	2.0	not avail.	0.3	0	0	Costa Rica - MS/CCSS Belize - Cent. Reg. Off.

ITEM NUMBER	INDICATOR	COUNTRY: Guatemala	El Salvador	Honduras	Panama	Costa Rica	Belize	COMMENTS/SOURCES
TIER III								
Effectiveness								
1.a	Cost per fully protected child	not avail.	not avail.	not avail.	not avail.	not avail.	not avail.	
1.b	Cost per death coverted by vaccinations	not avail.	not avail.	not avail.	not avail.	not avail.	not avail.	
1.c	Polio-assoc.	(1985)	(1985)	(1985)	(1985)	(1985)	(1985)	Guatemala - MSPAS El Salvador - MSPAS Honduras - MSP Panama - MS Costa Rica - MS/CCSS Belize - MOH
	1. Morbidity rate (per 100,000)							
	children 0-12 mos	1.0	1.6	0	0	0	0	
	children 13-60 mos	2.0	(all ages)	0.5	0	0	0	
	2. Mortality rate (per 100,000)	(1982-3)	(1981)	(1985)	(1985)	(1985)	(1985)	Guatemala - MSPAS El Salvador - MSPAS Honduras - MSP Panama - MS Costa Rica - MS/CCSS Belize - MOH
	children 0-12 mos	0	0.5	0.0	0	0	0	
	children 13-60 mos	0	(all ages)	not avail.	0	0	0	
1.d	Measles-assoc.	(1985)	(1985)	(1985)	(1985)	(1985)	(1985)	Guatemala - MSPAS El Salvador - MSPAS Honduras - MSP Panama - MS Costa Rica - MS/CCSS Belize - MOH
	1. Morbidity rate (per 100,000)							
	children 0-12 mos	134.0	28.0	663.3	498.0	0	0	
	children 13-60 mos	82.0	(all ages)	271.5	(children 0-60 mos)	0	9.2	

ITEM NUMBER	INDICATOR	COUNTRY Guatemala	El Salvador	Honduras	Panama	Costa Rica	Belize	COMMENTS/SOURCES
	2. Mortality rate (per 100,000)	(1983)	(1985)	(1983)	(1985)	(1985)	(1985)	
	children 0-12 mos	219.0	12.3	8.2	3.0	0	0	
	children 13-60 mos	111.0	(all ages)	not avail.	(children 0-60 mos)	0	0	
1.e	Tetanus assoc.	(1985)	(1985)	(1985)	(1985)	(1985)	(1985)	
	1. Morbidity rate (per 100,000)							Guatemala - MSPAS El Salvador - MSPAS Honduras - MSP Panama - MS Costa Rica - MS/CCSS Belize - MOH
	children 0-12 mos	10.0	2.0	0.6	.05	.23	1.2	
	children 13-60 mos	0.2	(all ages)	0.3	(all ages)	(all ages)	(all ages)	
	2. Mortality rate (per 100,000)	(1982)	(1981)	(1983)	(1985)	(1985)	(1985)	
	children 0-12 mos	3.0	1.0	0.6	0.05	0.15	0	
	children 13-60 mos	(all ages)	(all ages)	not avail.	(all ages)	(all ages)	0	
1.f	Pertussis-assoc.	(1985)	(1985)	(1985)	(1985)	(1985)	(1985)	
	1. Morbidity rate (per 100,000)							Guatemala - MSPAS El Salvador - MSPAS Honduras - MSP Panama - MS Costa Rica - MS/CCSS Belize - MOH
	children 0-12 mos	148.0	9.0	55.3	16.0	5.7	33.7	
	children 13-60 mos	470.0	(all ages)	11.7	(children under 5)	(all ages)	50.4	
	2. Mortality rate (per 100,000)	(1982)	(1981)	(1983)	(1985)	(1985)	(1985)	
	children 0-12 mos	163.0	3.0	32.4	1.0	0.08	0	
	children 13-60 mos	470.0	(all ages)	not avail.	(children under 5)	(all ages)	0	

ITEM NUMBER	INDICATOR	COUNTRY						COMMENTS/SOURCES
		Guatemala	El Salvador	Honduras	Panama	Costa Rica	Belize	
I.g	Diptheria-assoc.	(1985)	(1985)	(1985)	(1985)	(1985)	(1985)	
	1. Morbidity rate (per 100,000)							Guatemala - MSPAS El Salvador - MSPAS Honduras - MSP Panama - MS Costa Rica - MS/CCSS Belize - MOH
	children 0-12 mos	0.7	0.08	0.0	0.0	0.0	0	
	children 13-60 mos	0.4	(all ages)	(all ages)	(all ages)	(all ages)	0	
	2. Mortality rate (per 100,000)	(1982)	(1981)	(1985)	(1985)	(1985)	(1985)	
	children 0-12 mos	0.0	0.1	0.0	0.0	0.0	0	
	children 13-60 mos	(all ages)	(all ages)	(all ages)	(all ages)	(all ages)	0	
I.h	Neonatal Tetanus-assoc.	(1985)	(1985)	(1985)	(1985)	(1984)	(1985)	
	1. Morbidity (per 100,000)							Guatemala - MSPAS El Salvador - MSPAS Honduras - MSP Panama - MS Costa Rica - MS/CCSS Belize - MOH
	children 0-12 mos	2.0	1.0	10.0	4.0	0.0	0	
	children 13-60 mos	-	-	-	-	-	0	
					-			
	2. Mortality (per 100,000)	(1985)	(1981)		(1985)	(1984)	(1985)	
	children 0-12 mos	not avail.	0.2	not avail.	3.0	0.0	0	
	children 13-60 mos	-	-	-	-	-	0	
I.i	Percent of children 0-60 mos with weight for age deficiencies:	(1978)*	(1978)*	(1966)	(1975)	(1982)**	(1976-79)***	Guatemala - INCAP, MSPAS El Salvador - INCAP, MSPAS Honduras - INCAP, MSP Panama - MS, INCAP Costa Rica - MS/CCSS Belize - MOH *rural areas (G.) **children under 6 (C.R.) ***children under 3 (B.)
	Grade I	47.8	42.8	43.1	46.0	30.6	20.7	
	Grade II	26.0	10.0	18.4	18.0	3.3	5.5	
	Grade III	3.2	0.5	1.3	2.0	0.3	0.7	

ITEM NUMBER	INDICATOR	COUNTRY						COMMENTS/SOURCES
		Guatemala	El Salvador	Honduras	Panama	Costa Rica	Belize	
1.j	Percent of children 0-60 mos who are below 3rd percentile weight for age (z score - 2 s.d.)	(1985-86)*	(1978)*	(1966)	(1980)	(1982)**		
		33.6	17.9	28.5	15.8	6.3	not avail.	*children under 3,rural(G) **children under 6(C.R.)

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Two out of the four Tier II immunization indicators were answered by all countries: questions 1.a and 1.b relating to number of children 0-12 months who received each vaccine, and percent of women in fertile age who received 2 doses of tetanus toxoid (although most countries reported number of doses applied, rather than the number of children and the percent of pregnant women who received 2 doses of tetanus toxoid, rather than the percent of women in fertile age). Every country but El Salvador also had information on the percent of children 0-12 months of age with complete coverage by each vaccine. Tier II indicators 1.c, measles-associated mortality in children 0-60 months, and 1.d, neonatal tetanus-associated mortality in children 0-12 months of age were more difficult to obtain. Many countries reported only overall mortality or infant's rates for measles and did not code mortality data to separate neonatal tetanus from tetanus as a whole.

Sixteen indicators are listed for immunization under Tier III (including morbidity and mortality for each immunizable illness). Only two out of these sixteen (1.h and 1.i) are available for all six countries. The first two, 1.a and 1.b, ask the cost per fully protected child and the cost per death averted by vaccinations. This information is not available, as explained in Table 6 above, because of the difficulty of estimating the total cost of immunization activities in each country. Indicators 1.c through 1.h request morbidity and mortality rates for children 0-12 months and 13 to 60 months from each of the immunizable illnesses including polio, measles, tetanus, pertussis, diphtheria, and neonatal tetanus. Although each country may have this information somewhere in untabulated form, reporting varies from country to country. In many cases the data requested is not available, or is only available for the entire population or for children under five as a whole. The two indicators in Tier III for which information is available in all five countries are 1.h and 1.i, morbidity rates for neo-natal tetanus and the nutritional status of children under five.

Tiers I, II and III for nutrition are presented in Table 8. Only one of the six countries was able to give even partial information about the two indicators listed under Tier I: 1.a.1. and 1.b.1. which request information about community education in infant/child feeding and growth monitoring. As noted in ORT and immunization discussions, above, data about community

TABLE 8
NUTRITION TIERS I, II AND III

ITEM NUMBER	INDICATOR	COUNTRY						COMMENTS/SOURCES
		Guatemala	El Salvador	Honduras	Panama	Costa Rica	Belize	
TIER I								
Outputs								
I.a	1. No. of indiv. in the community taught infant/ child feeding	not avail.	(1985) 121	not avail.	not avail.	not avail.	not avail.	Guatemala - INCAP/MSPAS El Salvador - Project Hope Honduras - MSP Panama - Costa Rica - Belize -
I.b	2. No. of indiv. in the community taught growth monitoring	not avail.	not avail.	not avail.	not avail.	not avail.	not avail.	
Other Data Avail.	Percent efficiency in community education	(1985) 63% Centers 55-57% Posts						
	No of facilities providing educ. with supplementary feeding			(1985) 245				

ITEM NUMBER	INDICATOR	COUNTRY: Guatemala	El Salvador	Honduras	Panama	Costa Rica	Belize	COMMENTS/SOURCES
TIER II								
Effectiveness								
I.a	Percent of health workers demonst. growth monitoring and nutrition skills	not avail.	(1985) 60% (knowledge)	not avail.	not avail.	not avail.	not avail.	Guatemala - MSPAS, INCAP El Salvador - MSPAS Honduras - Costa Rica - Panama - Belize -
Other Data Avail.	Percent efficiency in personnel training	(1985) 67% Centers 22-29% Posts						
I.b	Percent of children breastfed and eating semi-solids at 6 mos.	not avail.	not avail.	(1984) 70.7*	not avail.	not avail.	not avail.	Guatemala - Assoc. Pro-Bienestar de la Familia El Salvador - CALMA Honduras - MSP Costa Rica - Assoc. Demográfica Costarricense Panama - MS Belize - UNFPA, PAHO *Percent of women who breastfed and gave semi-solids to their children at 6-8 mos. **three districts (B.)
Other Data Avail.	Av. duration of lactation (mos.)	(1983) 18.0	(1981) 12.0	(1984) 16.2	(1984-5) 11.1	(1985-86) 4.1	(1985)** 7-20	

ITEM NUMBER	INDICATOR	COUNTRY						COMMENTS/SOURCES
		Guatemala	El Salvador	Honduras	Panama	Costa Rica	Belize	
I.c	Percent of children 0-60 mos. weighed in the past 3 mos.	(1985-86)*			(1983)*	(1984)*		Guatemala - MSPAS, INCAP El Salvador - MSPAS Honduras - MSP Costa Rica - MS,CCSS Panama - MS Costa Rica - MS/CCSS **rural areas (G) *Children being weighed regularly (G.,P.,C.R.)
		27.4** (children under 3)	not avail.	not avail.	78.5 (0-11 mos.) 51.8 (12-59 mos.)	15.8	not avail.	
I.d	Percent of high risk children 0-60 mos. receiving follow-up since last weighing	not avail.	not avail.	not avail.	not avail.	not avail.	not avail.	Guatemala - El Salvador - Honduras - Costa Rica - Panama -
I.e	Percent of children under 0-60 mos who are severely undernourished (-2 sd z score weight/age)	(1985-86)*	(1978)**	(1966)	(1980)	(1982)		Guatemala - MSPAS, INCAP El Salvador -MSPAS, INCAP Honduras - MSP, INCAP Panama - MS, INCAP Costa Rica - MS/CCSS *Children under 3 yrs(G) **rural (G)(ES)
		33.6**	17.9	28.5	15.8	6.3	not avail.	
I.f	Percent of children 0-60 mos who were growing at least as fast as reference at last weighing	not avail.	not avail.	not avail.	not avail.	not avail.	not avail.	

ITEM NUMBER	INDICATOR	COUNTRY: Guatemala	El Salvador	Honduras	Panama	Costa Rica	Belize	COMMENTS/SOURCES
TIER III								
Impact								
I.a	Percent of children 0-60 mos with weight for age deficiencies:	(1978)*	(1978)*	(1966)	(1975)	(1982)**	(1976-79)***	Guatemala - INCAP, MSPAS El Salvador - INCAP, MSPAS Honduras - INCAP, MSP Panama - MS, INCAP Costa Rica - MS/CCSS Belize - MOH *rural areas (G.)(ES) **children under 6 (C.R.) ***children under 3 (B.)
	Grado I	47.8	42.8	43.1	46.0	30.6	20.7	
	Grade II	26.0	10.0	18.4	18.0	3.3	5.5	
	Grade III	3.2	0.5	1.3	2.0	0.3	0.7	
I.b	Percent of children 0-60 mos who are below 3rd percentile weight for age (z score - 2 s.d.)	(1985-86)*	(1978)***	(1966)	(1980)	(1982)**		
		33.6***	17.9	28.5	15.8	6.3	not avail.	*children under 3 (G.) **children under 6(C.R.) ***rural areas(G, ES)

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education is not regularly collected by the Ministries of Health in the sub-region.

None of the six indicators requested as Tier II in nutrition were answered by all countries studied. Three of the Tier II nutrition indicators were answered by only a few countries: question number 1.a which asks the percent of health workers who demonstrate growth monitoring and nutrition skills, question 1.c which asks for the percent of children 0-60 months of age weighed in the past three months, and question 1.b. relating to the percent of children breastfed and eating semi-solids at six months of age. Five of the six countries have recently done national-level maternal-child health surveys and so were able to provide some information on average duration of lactation, but none had analyzed lactation and weaning data in order to answer the indicator posed here in 1.b. No country was able to provide data for questions 1.d, percent of children receiving follow-up since last weighing, or 1.f, percent of children growing at least as fast as reference at last weighing. Indicator 1.e which asks for the percent of children 0-60 months of age who are severely malnourished (Z score of -2 sd, weight/age) was answered by five out of the six..

Tier III nutrition indicators request information on the percent of children with grades I, II and III weight/age deficiencies (1.a) and the percent of children with Z scores of -2 sd (1.b). All countries were able to provide data on the first indicator, and all but Belize provided information on the second.

In summary, in the area of oral rehydration, Tier III indicators were answered most completely by all countries (an average of 5 out of the 7 requested), followed by Tier II (3 out of 6) and then Tier I (nearly 1 out of the 2 requested). Honduras, Panama, Costa Rica and Belize answered Tier III most completely and El Salvador answered Tier I and Tier II most completely. In the area of immunization, the situation was reversed, with countries able to answer most completely Tier I (over 3 out of the 4 indicators requested, and Tier II (3 out of the 4), then Tier I (6 out of the 16). Tier I indicators were answered most completely by Honduras, Panama, Guatemala, Belize and Costa Rica; Tier II were answered most completely by Panama, Costa

Rica and Belize, and Tier III indicators were answered most completely by Guatemala and Belize. The area of nutrition was similar to that found in oral rehydration. Countries were able to respond most completely to indicators found in Tier III (2 out of 2), followed by Tier II (nearly 2 out of the 6 requested), and then Tier I (only one country able to respond to 1 of the 2 indicators in this tier). Tier III indicators were answered completely by all countries except Belize, Tier II were answered most completely by all countries except Belize, while Tier I indicators were only partially answered by El Salvador.

Problems with Tier I indicators involved difficulties answering questions about community-level training in infant/child feeding, growth monitoring and ORT. As noted above, Ministries of Health do not regularly collect data on numbers of persons in the community who have received training. Most countries also had difficulty answering questions about dehydration (a category not coded by Ministries in the sub-region as a cause of illness or death), and the number of vaccine doses procured in 1985.

Information was not available for Tier II on health worker knowledge and skills relating to ORT/ORS, infant and child feeding and nutrition, community-level knowledge of ORT/ORS and community ever-use rates for ORS, dehydration-associated morbidity, number of children weighed and receiving follow-up, and number growing at least as fast as reference at last weighing (information on growth velocity rather than status at a given point in time). Health worker knowledge and skills information requires implementation of provider surveys and subsequent disaggregation of specific data in order to answer specific questions. Those countries which have done provider surveys have not broken out the data necessary to answer Tier II questions posed here. Community-level surveys have been done in many of the five countries in the sub-region, however only a few have asked questions about knowledge or general ever-use of ORS or ORT. As noted above, dehydration information is not available in most countries as dehydration is not specified as a cause of morbidity or mortality. As for growth monitoring questions, most Ministries of Health in the sub-region do not regularly collect information on numbers of children monitored, nor do they have data on follow-up of high risk cases or

growth velocities. The age-specific mortality information requested is undoubtedly available in all Ministries, but is not a part of normal reporting. Most countries also have conducted maternal-child health surveys which provide information on lactation and introduction of food (see detailed country annexes this report), however only one country provides information on percent of children breastfed and eating semi-solids at six months of age.

Country problems answering Tier III indicators involved difficulty in estimating the total cost of each kind of Child Survival activity in each country. Although, again, this data undoubtedly exists, it is either not broken down by Child Survival activity in Ministry budgets, or is difficult to obtain from the many health organizations involved in the Child Survival effort. Problems with Tier III were also encountered in obtaining age-specific morbidity and mortality data, as this information is not disaggregated in Ministry reporting formats.

ROCAP Project indicators

A summary of the status of ROCAP Project Indicators is presented in Table 9. Indicator number 1, infant mortality rate, is available for all six countries. Indicator number 7, availability and commercial sales of ORS, is also available for each country, though private sector production information is lacking. Indicators number 3 (national capacities to plan, implement and evaluate diarrheal disease, growth monitoring and related health/nutrition education programs), 5 (technical information disseminated in a timely manner and utilized by health care personnel) and 8 (the strengthening of national health information systems), are all indicators which may best be answered through program evaluations. ROCAP indicator number 4, number of health workers trained in ORT, growth monitoring and proper feeding practices, suffers from the lack of systematic training information collected by the Ministries of Health in all six countries (see discussions Tables 6, 7, and 8 above). Indicator 6 requests information on community knowledge of proper post-diarrheal feeding practices, low birthweight indicators and appropriate interventions, and prevention and management of chronic diarrhea and it's

TABLE 9
ROCAP PROJECT INDICATORS

ITEM NUMBER	INDICATOR	COUNTRY: Guatemala	El Salvador	Honduras	Panama	Costa Rica	Belize	COMMENTS/SOURCES
1.	Infant Mortality Rates (Per 1,000 live births)	(1985) 68.5	(1985) 67.7	(1980's) 71-85	(1985) 26.9	(1985) 16.2	(1985) 21.4	Guate.: MSPAS E.S.: USAID/E.S. Hond.: MSP Pan.: MS C.R.: Asoc. Demográfica Costarricense Belize: MOH
2.	Percent of Children 0-60 mos. with weight/age Z scores - -2 sd.	(1985-86)* 33.6***	(1978)* 17.9	(1966) 28.5	(1980) 15.8	(1982)** 6.3	not avail.	Guate.: INCAP, MSPAS E.S.: MSPAS, INCAP Hond.: MSP, INCAP Pan.: MS C.R.: MS/CCSS *rural areas (ES)(G.) **children under 6(C.R.) ***children under 3(G)
3.	National capacity to plan, implement and evaluate diarrheal disease, growth monitoring and related health/nutrition education programs	*	*	*	*	*	*	*Info. available from Program evaluations
4.	No. of health workers trained in:	(1985)	(1985)	(1985)		(Up to 1986)		Guate: INCAP E.S.: MSPAS, INCAP Hond.: MSP Pan.: - C.R.: PAHO, INCAP *cumulative, 1981-85(Hond.)
	a. ORT	Not avail.	2,256	30,983*	Not avail.	3,325	not avail.	
	b. Growth Monitoring	25	40	13	Not avail.	10	not avail.	
	c. Proper Feeding Practices	(All nutrition subjects)	197	882	Not avail.	Not avail.	not avail.	

ITEM NUMBER	INDICATOR	COUNTRY: Guatemala	El Salvador	Honduras	Panama	Costa Rica	Belize	COMMENTS/SOURCES
5.	Technical information disseminated and utilized by health personnel in the region	*	*	*	*	*	*	*Info. available from Program evaluations
6.	Practical knowledge available to the community on:			(1985)*				Guate.: - E.S.: - Hond.: MSP,UNICEF Pan.: - C.R.: -
	a. A proper post-diarrheal feeding practices	Not avail.	Not avail.	Not avail.	Not avail.	Not avail.	Not avail.	*perc. of mothers who have heard radio messages about the management of diarrhea (4 regions)(Hond.)
	b. Low birth weight risk indicators and appropriate intervention	Not avail.	Not avail.	Not avail.	Not avail.	Not avail.	Not avail.	
	c. Prevention and management of chronic diarrhea and its nutritional consequences	Not avail.	Not avail.	100%	Not avail.	Not avail.	Not avail.	
7.	Availability and commercial sales of ORS	(1985)* 700,000 (liters)	(1985-86)* 2,019,000 (liters) 156,000 (1/2 liters) 465,000 (1/4 liters)	(1985)* 3,000,000 (liters)	(1985)* 150,000 (Liters)	(1985)* 1,500,000 (Liters) 870,000 (1/2 liters)	(1985) 47,900 (Liters)	Guate.: MSPAS, USAID/G E.S.: MSPAS, USAID/ES Hond.: MSP Pan: PAHO C.R.: MS/CCSS Belize: MOH *procurement/production only

ITEM NUMBER	INDICATOR	COUNTRY: Guatemala	El Salvador	Honduras	Panama	Costa Rica	Belize	COMMENTS/SOURCES
8.	Strength of national health info. systems	*	*	*	*	*	*	*Data available from Program evaluations
9.	Community acceptance of appropriate practices for home treatment of diarrheal diseases and assoc. pro-energy malnutrition:		(1985)	(1985)*		(1984)		Guate.: MOH, INCAP E.S.: USAID/E.S., PAHO Hond.: MSP Pan.: MS C.R.: MS/CCSS, LAC Bureau Belize: MOH, PAHO * four regions (Hond.)
	a. Percent use-rate of:							
	- ORS	Not avail.	18	87	Not avail.	Not avail.	Not avail.	
	- ORT	Not avail.	Not avail.	Not avail.	Not avail.	21	Not avail.	
	b. Percent of children 0-59 mos. with diarrhea in the past 2 weeks, treated with:	(1985-6)*****	(1986)	(1984)	(1984-85)	(1984)	(1983-84)	*Diarrhea in the past month **Diarrhea in the past week ***Diarrhea in past 3 days ****Last case of diarrhea *****rural areas
	- ORS	3.5	44****	17.1***	4.3**	78*	Not avail.	
	- ORT	3.7 (children under 3)	Not avail.	Not avail.	0.7	Not avail.	42.3	
	c. Percent of mothers who suspend food when child has diarrhea	Not avail.	Not avail.	(1985)* 31.8	Not avail.	(1984) 70	(1983) 45	*Four regions

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consequences. Except for an occasional case study report, there is virtually no information on community knowledge about any of these subjects. (Note: The second centinel area study in Guatemala asks questions about the management of diarrhea in the home, and special study of diarrheal feeding is planned). Indicator number 9, community acceptance of appropriate practices for home treatment of diarrheal diseases and associated protein-energy malnutrition, is partially answered by each country. All countries have data on the percent of children 0-59 months of age or 0-35 months of age with diarrhea (in the past 2 weeks, past 2 days, past month, last case of diarrhea) who were treated with ORS/ORT. The only indicator available for more than one country on appropriate feeding is the percentage of mothers who suspend food when the child has diarrhea.

In summary, all six countries were able to answer four to seven of the nine indicators used for ROCAP Child Survival activities. Honduras, El Salvador and Costa Rica answered most completely. Three of the nine questions: numbers 3, 5 and 8 involving national capacity to plan, implement, and evaluate Child Survival programs, disseminate technical information in a timely manner and make sure it is utilized by health care personnel, and strengthen national health information systems were not answerable through normal information channels. It is assumed here that these issues will be addressed through project evaluations. Countries had problems in particular answering indicators relating to health worker training, a problem area identified in Tier indicator discussions above, and in all questions relating to community knowledge of proper post-diarrheal feeding practices, low birthweight and appropriate intervention, and prevention of diarrheal disease. Although ROCAP did not specify which information it needed to quantify community acceptance of appropriate practices for home treatment of diarrheal diseases and associated protein-energy malnutrition, data was available in all countries on use of ORS during recent episodes of childhood diarrhea, and some countries could provide additional information on ever-use rates for ORS as well as percent of mothers who suspend food during diarrheal illness.

Annexes

The annexes in this report are the detailed responses of each of the six countries to Tiers I, II and III, and ROCAP indicators. Each annex constitutes the most complete 1985 Child Survival Baseline available for each of the six countries studied in the Central American sub-region. Data presented here was collected from varied sources including The Ministries of Health and Social Security, Divisions of Nutrition, Maternal-Child Health, Statistics, Epidemiology, Immunizations, Control of Diarrheal Disease, each country's General Direction for Statistics and Census, the Pan American Health Organization based in each country, the U.S. Agency for International Development in each country, private voluntary organizations, national lactation programs, national demographic associations, UNICEF and INCAP among others. Types of data reported range from information provided by routine national health information systems, to special national or regional surveys and ethnographic case studies, to detail provided by Ministry department files.

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ANNEX

A

LIST OF INDICATORS FOR CHILD SURVIVAL BASELINE, 1985
TIER I
(from final Tier I list, Washington)

Demographics

1-1.1 Total population in project area
1-1.2 Number of children by age (total under 12 mos, 12-59 mos, and by discrete ages)
1-1.3 Number of women of reproductive age by age group (by years, 15-49)
1-1.4 Annual number of live births
1-1.5 Annual number of infant and child deaths by age (total under 12 mos, 12-59 mos and by discrete ages)
1-1.6 Number of health workers in project area (physicians, other health personnel, voluntary/community health workers, other)
1-1.7 Number of government health facilities, service units or distribution points in project area

Oral Rehydration (ORT)

2-1.1 Number of ORS packets imported and locally produced by the project by size of packet
2-1.2 Cost per packet to the project
2-1.3 Price per packet to the project
2-1.4 Number of health workers in project area to be trained during reporting period and number actually trained through project activities to teach ORS/ORT by type of worker (physicians, other health personnel, voluntary/community health workers, other)
2-1.5 Number of government health facilities, service units or distribution points for ORS/ORT in project area
2-1.6 Number and type of health facilities, service untis, or distribution points in project area participating in project activities to provide ORS packets (public and private)
2-1.7 Number and type of health facilities, service units or distribution points in project area with an appropriate number of, but no fewer than 10, ORS packets in inventory (public and private)
2-1.8 Number and type of health facilities, service units or distribution points in project area with ORS packets in inventory and a trained person available.

Immunization

3-1.1 Number of vaccine doses procured by the project, by type (measles, polio, DPT, BCG)
3-1.2 User fees charged for immunizations
3-1.3 Number of health workers in project area to be trained during reporting period and number actually trained through project activities to teach about or give immunizations, by type of worker (physician, other health personnel, voluntary/community health workers, other)
3-1.4 Number and type of health facilities, service units or distribution points in project area capable of providing immunizations (public and private)
3-1.5 Number and type of health facilities, service units or distribution points in project area participating in project activities to provide immunizations (public and private)

3-1.6 Number and type of health facilities, service units or distribution points in project area with specified vaccines in inventory (measles, polio and DPT) (public and private)
3-1.7 Number of health facilities, service units or distribution points in project area with operating cold chain equipment

Nutrition
4-1.1 Number of health workers in project area to be trained during reporting period and number actually trained through project activities to teach infant and child feeding practices (physicians, other health workers, volunteer/community health workers, other)
4-1.2 Number of health workers in project area to be trained during reporting period and number actually trained through project activities to teach growth monitoring (physicians, other health workers, volunteer/community health workers, other)
4-1.3 Number and type of project facilities, service units or distribution points in project area with operating scales (public and private)
4-1.4 Number of mothers/mother substitutes given nutrition counseling during the reporting period.
4-1.5 Number of children under age five enrolled in growth monitoring programs.

High Risk Birth
5-1.1 Number of contraceptives procured by the project, by type of contraceptive
5-1.2 Number of health workers in project area to be trained during reporting period and number actually trained through project activities to teach about high risk births or given family planning advice by type of worker (physicians, other health workers, volunteer/community health workers, other)
5-1.3 Number of government health facilities, service units or distribution points for contraceptives in project area
5-1.4 Number and type of health facilities, service untis or distribution points in project area participating in project activities to provide contraceptive methods
5-1.5 Number and type of health facilities, service units or distribution points in project area with at least five units of any contraceptive supply method in inventory

TIERS I, II and III

Oral Rehydration Therapy (ORT)

Tier I
Outputs
1.a Number of individuals in the community taught ORT
Impact
2.a Number of severe cases of dehydration per year

Tier II
Effectiveness
1.a Percent of health workers demonstrating ORT knowledge and skills

1.b Percent of individuals in the community with knowledge of ORT
1.c Percent of children under five ever treated with ORT
1.d Percent of children under five with diarrhea in the past two weeks who were given ORT

Impact

2.a Diarrhea-associated mortality rate in children 0-12 months of age and children 13-60 months of age (per 10,000 children of the same ages)
2.b Diarrhea-associated severe dehydration rate in children 0-60 months of age (per 1,000 children of the same age)

Tier III

Effectiveness

1.a Cost per episode of diarrhea treated by ORT
1.b Cost per death averted by ORT

Impact

2.a Diarrhea-associated mortality rate in children 0-12 months of age (per 1,000 children of the same age)
2.b Diarrhea-associated morbidity rate in children 0-12 months of age (per 100,000 children of the same age)
2.c Diarrhea-associated morbidity rate in children 0-60 months of age (per 100,000 children of the same age)
2.d Percent of children under 60 months of age with weight for age deficiencies (Grades I,II, and III)
2.e Percent of children under 60 months of age who are below the 3rd percentile of weight for age

Immunization

Tier I

Inputs

1.a Number of vaccine doses imported or locally produced by the project (DPT, measles, polio, BCG, total)

Impact

2.a Number of cases of neonatal tetanus
2.b Number of cases of measles
2.c Number of cases of polio

Tier II

Effectiveness

1.a Number of children 0-12 months of age having received polio 1, polio 3, measles, DPT 1, DPT 3, BCG and all vaccinations
1.b Percent of women 15-49 years of age who have received two doses of tetanus toxoid
1.c Measles-associated mortality rate in children 0-60 months of age (per 10,000 children of the same age)
1.d Neonatal tetanus associated mortality rate in children 0-12 months of age (per 10,000 children of the same age)

Tier III

Effectiveness

1.a Cost per fully protected child

1.b Cost per death averted by vaccinations
1.c Polio-associated morbidity and mortality rates, children 0-12 months of age and 13-60 months of age (per 100,000 children of the same ages)
1.d Measles-associated morbidity and mortality rates, children 0-12 months of age and 13-60 months of age (per 100,000 children of the same ages)
1.e Tetanus-associated morbidity and mortality rates, children 0-12 months of age and 13-60 months of age (per 100,000 children of the same ages)
1.f Pertussis-associated morbidity and mortality rates, children 0-12 months of age and 13-60 months of age (per 100,000 children of the same ages)
1.g Diphtheria-associated morbidity and mortality rates, children 0-12 months of age and 13-60 months of age (per 100,000 children of the same ages)
1.h Neonatal tetanus-associated morbidity and mortality rates, children 0-12 months of age and 13-60 months of age (per 100,000 children of the same ages)
1.i Percent of children under 60 months of age with weight for age deficiencies (Grades I,II and III)
1.j Percent of children under 60 months of age who are below the 3rd percentile weight for age

Nutrition

Tier I
Outputs
1.a.1 Number of individuals in the community taught infant/child feeding
1.a.2 Number of individuals in the community taught growth/development

Tier II
Effectiveness
1.a Percent of health workers demonstrating growth monitoring and nutrition skills
1.b Percent of children breastfed and eating semi-solids at 6 months of age
1.c Percent of children under five years of age weighed in the past three months
1.d Percent of high risk children under five years receiving follow-up since last weighing
1.e Percent of children under five years who are severely undernourished
1.f Percent of children under five years of age who were growing at least as fast as reference at last weighing

Tier III
Impact
1.a Percent of children under 60 months of age with weight for age deficiencies (Grades I, II, and III)
1.b Percent of children under 60 months of age below the 3rd percentile weight for age

RCCAP Project Indicators
1. Infant mortality rate
2. Percent of children under age five exhibiting severe growth retardation
3. National capacity to plan, implement and evaluate programs aimed at control and treatment of diarrheal diseases, growth monitoring and related health/nutrition education.

4. Health care training in ORT, growth monitoring and proper feeding practices
5. Technical information disseminated in a timely manner and utilized by health care personnel in the region
6. Practical knowledge available to the community regarding proper post-diarrheal feeding practices, low birthweight risk indicators and appropriate intervention, and prevention and management of chronic diarrhea and it's nutritional consequences
7. Availability and commercial sales of ORS in the sub-region
8. Strength of national health information systems in each country
9. Community acceptance of appropriate practices for home treatment of diarrheal diseases and associated protein-energy malnutrition

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GUATEMALA

ANNEX

B

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CHILD SURVIVAL BASELINE 1985
GUATEMALA
TIER I

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
Demographic			
1-1.1	7.9 million	1985 population projections (mid-year)	Ministry of Public Health and Social Assistance (1985) Evaluacion de las Condiciones de los Servicios de Salud Materno-Infantil Julio-Agosto, 1985 from Instituto Nacional de Estadistica and Anuario, 1985.
	8.2 million	1985 pop. projections	MSPAS/USAID/G
	8.4 million	1985 (midyear) population projections	Centro Latinoamericano de Demografia (1982) Boletin Demografico.
	7.9 million	1985 (midyear) population projections	MSPAS, Anuario, 1985
1-1.2	1.4 million	0-59 months (1985) population projections	Centro Latinoamericano de Demografia (1984) Boletin Demografico and MSPAS Anuario, 1985.
	343,221 1,090,183 1,433,414	0-12 months (1985) population projections 13-59 mos. (1985) population projections TOTAL 0-59 months	Ministry of Public Health and Social Assistance (1985) Evaluacion de las Condiciones de los Servicios de Salud Materno-Infantil, Julio-Agosto, 1985 from Depto. de Salud Materno-Infantil.
	303,306 1,130,241 1,433,547	0-12 mos. (1985) 13-59 mos. (1985) TOTAL 0-59 months of age	MSPAS Anuario 1985

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
	340,097	0-12 months (1985)	MSPAS/USAID/G
	1,143,219	13-59 months (1985)	
	1,483,316	TOTAL 0-59 months	
I-1.3	1,608,598	Total Women 15-44 (1985) pop. projection	MSPAS - Anuario 1985
	1,737,474	Total Women 15-49 (1985) pop. projection	Centro Latinoamericano de Demografia (1984)
	414,811	Women 15-19	Boletin Demografico and MSPAS Anuario, 1985.
	345,210	" 20-24	
	280,908	" 25-29	
	235,243	" 30-34	
	182,805	" 34-39	
	149,551	" 40-44	
	128,946	" 45-49	
		Women 15-49 years = 22.6% of pop'n.(1983)	Asoc. Pro-Bienestar de la Familia, CDC(1984) Family Planning and Maternal/Child Health Survey, Guatemala, 1983
I-1.4	339,700	Estimate number of births in 1985 (this is total births, not live births) based on a 1984 birth rate of 431/1000 and a population (1985) of 7.9 million.	Same as above - MSPAS and CELADE
	303,687	Births (1985)(although listed as births, these are live births according to the Unidad Informatica)	MSPAS Anuario 1985
I-1.5	71,272	No. of infant deaths(1985)	MSPAS/USAID/G
	79.8/1000	Infant mortality rate (1984)	MSPAS (1985) Evaluacion de las Condiciones de los Servicios de Salud Materno-Infantil Julio-Agosto, 1985 from Salud Materno-Infantil.
	67/1000	Infant mortality rate (1984)	Bureau for LA and the Caribbean(1986)Health.

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
	68.5/1000	Infant mortality rate (1985)	MSPAS Anuario 1985
	15.5/1000	13-59 months mortality (1983) (Child Death Rate)	MSPAS (1985) Evaluacion de las Condiciones de los Servicios de Salud Materno-Infantil Julio-Agosto, 1985 from Salud Materno-Infantil.
	77.8/1000 114.4/1000	Infant mortality rate (1985)(rural) Probability of dying in first 2 years of life (1985)(rural)	Min. de Salud, INCAP(1986)Encuesta Nacional Simplificada de Salud y Nutricion Materno-Infantil
I-1.6		MSPAS (1985)	
	1,268 6,106	-Physicians -Other health personnel (includes graduate nurses and auxiliary nurses)	Ministry of Public Health and Social Assistance (1985) Memoria de Labores
		MSPAS (1983)	
	12,058	Vol./community health workers (includes rural health technicians, traditional midwives and health promoters). (Does not include malaria volunteers). (Does not include Social Security. personnel).	Ministry of Public Health and Social Assistance (1985) Evaluacion de las Condiciones de Eficiencia de los Servicios de Salud Materno-Infantil

INDICATOR NO.	DATA AVAILABLE		TYPE OF DATA/COMMENTS	SOURCE
1-1.7	(1983) IGSS	(1985) MSPAS	MSPAS and IGSS	IGSS (1983) Unidad de Informatica MSPAS Anuario 1985
	30	35	Hospitals	
	-	212	Centros de Salud (A and B)	
	27	662	Puestos de Salud	
	14	-	Consultorios	
	13	-	Annexes	
	-	37	Others (including polos de desarrollo) (Does not include the army or the municipality of Guatemala).	
			Private Sector (1983)	
		49	Hospitals	
			Note: USAID/G says MSPAS has 819 facilities total(1985) rather than 946	
ORT				
2-1.1	700,000 - 1 litre		USAID/G procured for MSPAS(1985) (does not include UNICEF)	USAID/G
	Some		Private sector - Lab. Bonin (1 liter)	USAID/ROCAP(1984)"Consultancy visit on ORS production and distribution in Guatemala, Honduras, El Salvador and Panama"
2-1.2	0.20		Cost per liter	USAID/G
2-1.3	free		Public Sector	USAID/G
2-1.4			USAID/G - None trained in 1986	USAID/G
			No INCAP training on ORT in 1985	INCAP

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
	67%	Percent efficiency of training in health centers	Ministry of Public Health and Social Assistance (1985) Evaluacion de las Condiciones de Eficiencia Materno-Infantil
	29-22%	Percent efficiency of training in health posts	
	48%	Percent efficiency of training in health areas, peds. and obstetrics.	
2-1.5	1,030	MSPS and IGSS facilities	IGSS (1983) Unidad Informática and MSPAS Anuario, 1985
2-1.6	1,030	MSPAS and IGSS facilities	IGSS (1983) Unidad Informática and MSPAS Anuario, 1985
2-1.7 and 2-1.8	not avail.	MSPS reports 100% coverage. Systems survey data below more valid although not disaggregated.	
	60% efficiency (lack of ORT equipment, salts, ORT area)	Logistics Efficiency level health centers and health posts - logistics	Ministry of Public Health and Social Assistance (1985) Evaluacion de las Condiciones de Eficiencia de los Servicios de Salud Materno-Infantil.
IMMUNIZATION			
3-1.1		No. of doses applied(1985):	Min. de Salud(1986)Programa PAI
	5,389	Measles	
	12,258	Polio	
	12,003	DPT	
	3,540	BCG	
		No. of doses procured (1985):	Min. de Salud (1985) Informe Sobre el Programa PAI de Guatemala
	300,000	Measles	
	1 million	Polio	
	1 million	DPT	
	150,000	BCG	
3-1.2	none	Public sector	Min. de Salud (1986) Programa PAI

INDICATOR NO.	DATA AVAILABLE		TYPE OF DATA/COMMENTS	SOURCE
3-1.3	To be trained	Actually Trained	Ministry of Health (1985)	USAID/G of MSPAS
	80	80	physicians	
	675	675	other health personnel	
	4648	3951	volunteers	
	69%	- Centers	Efficiency Level	MSPAS(1985)Evaluacion de las Condiciones de Eficiencia, Materno-Infantil
	29-22%	- Posts	of Personnel Training (1985)	
3-1.4	6,924		Including vaccination posts	USAID/G
3-1.5			Same as above.	Same as above.
3-1.6	64%		Efficiency Health Centers - Logistics	MSPAS (1985) Evaluación de las Condiciones de Eficiencia, Materno-Infantil.
	67-58%		Efficiency Health Posts - Logistics (insufficient quantity of materials and equipment).	
3-1.7	60%		Efficiency level of equipment of health Centers and health centers and health posts (lack of cold chain equip.)	Ministry of Public Health and Social Assistance (1985) Evaluacion de las Condiciones de Eficiencia, Materno-Infantil.
	12%		Percent of health centers and posts without refrigeration of any kind(1985)	UNICEF(1985)Situacion Analitica de la Cadena de Frio para Conservacion de Biologicos en Guatemala
	69%		Percent of refrigerators in health centers and health posts that are in good condition (1985)	

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
NUTRITION			
4-1.1	25	All health professional levels (1985)	INCAP(1986) Informacion sobre Capacitacion 1985, Programa de TRO
	67% 22-29%	Efficiency health centers - training. Efficiency health posts - training.	Min. de Salud(1985) Evaluacion de las Condiciones de Eficiencia Materno-Infantil
4-1.2	10	All health professional levels (1985)	INCAP(1986) Informacion sobre Capacitacion 1985, Programa de TRO
	67% 22-29%	Efficiency health centers - training. Efficiency health posts - training.	Min. de Salud(1985) Evaluacion de las Condiciones de Eficiencia Materno-Infantil
4-1.3	58-69%	Efficiency logistics (Equip.)	Same as above.
4-1.4	63% 55-58%	Efficiency in community ed. (health centers) Efficiency in comcunity ed. (health posts)	Ministry of Public Health and Social Assistance (1985) Evaluacion de las Condiciones de Eficiencia Materno-Infantil
4-1.5	27.4%	Perc. of children 0-36 months of age enrolled in growth monitoring. (1985) (rural)	Min. de Salud, INCAP(1986) Encuesta Nacional Simplificada de Salud y Nutricion Materno Infantil

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
High Risk			
5-1.1	not applicable		
5-1.2	not available		
5-1.3 to 5-.1.5	not applicable		

4569g

4569g

CHILD SURVIVAL BASELINE DATA 1985

GUATEMALA

TIER I, II AND III and ROCAP Indicators

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
ORT			
TIER I			
Output			
1.a	Unavailable		MSPAS
	63% efficiency	Community ed. in health centers	Ministry of Public Health and Social Assistance (1985) Evaluacion de las Condiciones de Eficiencia Materno-Infantil
	55-57% efficiency	Community ed. in health centers (1985)	
Impact			
2.a		Dehydration not listed among the first 10 causes of illnes (1985).	MSPAS
	1,657 or	Deaths due to dehyd. (all ages)	Ministry of Public Health and Social Assistance (1985) Memoria de Labores
	2.8 / 10,000 pop.	Dehydration - related mortality rate (1985 - all ages)	
	1.2% of children w/diarrhea	Cases of severe dehydration found in one community study(1985)	INCAP (1985) "Situacion de Salud y Nutricion del Distrito de Salud El Milagro, Area de Salud, Guatemala Sur.

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
TIER II			
Effectiveness			
I.a	not available		MSPAS, INCAP
	67% efficiency 29-22% efficiency	Training of personnel (health centers) Training of personnel (health posts) (1985)	Ministry of Public Health and Social Assistance (1985) Evaluación de las Condiciones de Eficiencia Materno-Infantil
I.b	ORS is well known	Information available from case study	INCAP (1986) "Investigación Etnográfica Sobre Algunos Aspectos de Salud y Nutricion Realizada en la Colonia Juárez, Guanaguazapa."
I.c	ORS is not popular (salty, chilren don't like it, doesn't cure diarrhea)	Information available from case study	Same as above
I.d	7.4% - ORS 1.4% - ORT	Perc. of cases of diarrhea in past 2 wks treated w/ORT (1983) (children 0-59 mos)	Asoc. Pro-Bienestar de la Familia, CDC(1984) Family Planning and Maternal/Child Health Survey, Guatemala, 1983
	0.6%	Percent of cases of diarrhea in the past 2 weeks which were treated w/ORS (1985) (children under 59 mos)	INCAP (1986) "Situacion de Salud y Nutricion del Distrito de Salud y Nutricion de Salud del Milagro, Area de Salud de Guatemala Sur".
	3.5% - ORS 3.7% - suero casero	Treatment of diarrhea in past 2 weeks (Children 0-3) (1985-86)(rural)	Min. de Salud, INCAP(1986)Encuesta Nacional Simplificada de Salud y Nutricion Materno Infantil

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
Impact			
2.a	72.2 / 10,000 children (0-5 years)	Death rate due to diarrhea in children 0-59 mos (1983)	Ministry of Public Health and Social Assistance (1986) Plan de Accion de Supervivencia Infantil, from DGSS, 1983
	12.7 / 10,000 pop. (all ages)	Diarrhea-associated death rate (ill-defined intestinal infections + acute gastro-enterocolitis) (1985) - (all ages only).	Ministry of Public Health and Social Assistance (1985) Memoria de Labores
2.b	1-2%	Cases of severe dehydration assoc. with diarrhea (0-59 mos) (1985) Community Case Study	INCAP (1985) "Situacion de Salud y Nutricion del Distrito de Salud El Milagro Area de Salud, Guatemala Sur.
TIER III			
Effectiveness			
1.a	not available		
1.b	not available		
Impact			
2.a	1,128	Diarrhea-assoc. mortality 0-12 mos(1984) (3,440 deaths)	Min. de Salud (1984) Plan Nacional de Supervivencia Infantil, 1985-86
2.b	20%	Percentage of children under 3 with diarrh. in the past 2 weeks (1985-86)(rural)	Min. de Salud, INCAP(1986)Encuesta Nac. Simplificada de Salud y Nutricion Materno Infantil

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
	25.6%	Percentage of children under 5 with diarrh. in the past 2 weeks (1983) (all ages)	Asoc. Pro-Bienestar de la Familia, CDC(1984) Family Planning and Maternal/Child Health Survey, Guatemala, 1983
	152,169	(1985) cases (all ages) seen at MSPAS facilities (ill-defined intestinal infection, intestinal parasites, acute gastro-entero-colitis, ameblasis).	Ministry of Public Health and Social Assistance (1985) Memoria de Labores
	194.9 / 10,000 inhabitants	Diarrhea-assoc. morbidity rate (1985) (all ages) - MSPAS facilities	
	23,065 / 100,000	(1985) (children 0-12 mo.) cases at MSPAS facilities (ameblasis, diarrhea, dysentery).	MSPAS Anuario, 1985
	40%	Percent of children under 5 w/diarrh. in the past 2 weeks (June, 1985). Community case study	INCAP (1985) "Situacion de Salud y Nutricion del Distrito de Salud El Milagro Area de Salud Guatemala Sur.
2.c	48,231	Cases of diarrhea seen in MSPAS facilities(1-5 Years)(1985) (ameblasis, diarrhea and dysentery)	MSPAS Anuario, 1985
	426.7/10,000	Rate per 10,000 children 1-5 years	

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
2.d and 2.e		1978-NCHS (wt/age) (children 0-59 mos.) (rural areas)	INCAP (1985) Analisis Uniforme de Datos Antropometricos para Sistemas de Vigilancia Alimentario-Nutricional.
	47.8%	Grade I	
	26.0%	Grade II	
	3.2%	Grade III	
	(1985-6) 33.6% - (0-3's) (Rural) / (1978) 43.6% 12.1% (0-5's) (Rural)	Z Scores (wt/age) - 2sd - 3sd	Min. de Salud, INCAP(1986)Encuesta Nac. Simplificada de Salud Materno-Infantil INCAP (1985) Analisis Uniforme de Datos Antropometricos para Sistemas de Vigilancia Alimentario-Nutricional.
	15%	- 2sd (1985) (wt/age)(children under 5) Community Case Study	INCAP (1985) "Situacion de Salud y Nu- del Distrito de Salud El Milagro, Area de Salud Guatemala Sur."
NUTRITION TIER I			
Output			
1.a.1	not available		MSPAS, INCAP
1.a.2	not available		MSPAS, INCAP
	63%	Efficiency of commun. ed. (health centers)	MSPAS (1985) Evaluación de las Condiciones de Eficiencia Materno - Infantil
	55-57%	Efficiency of commun. ed. (health posts)	

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
TIER II			
Effectiveness			
1.a	not available		MSPAS, INCAP
	67% 29-22%	Efficiency of personnel training (Centers) Efficiency personnel training (hlth. posts)	MSPAS (1985) Evaluación de las Condiciones de Eficiencia Materno - Infantil
1.b	Most children breastfed to 18 or 24 months, food introduced at 6-8 months	(1985) community case study (indigenous)	INCAP (1985) "Investigacion Etnografica Sobre Algunos Aspectos de Salud y y Nutricion en una Comunidad de Huehuetenango.
	Most children breastfed to 18 months, food introduced at 4-8 months	(1985) community case study (ladino)	INCAP (1985) "Investigacion Etnografica Sobre Algunos Aspectos de Salud y y Nutricion realizada en la Colonia Juarez, Guanagazapa."
	81%	Percent of last born children breastfed for more than 6 months.(1985-6)(rural)	Min. de Salud, INCAP(1986)Encuesta Nacional Simplificada de Salud Materno Infantil
	45% of mothers supplement breast-milk w/food at 3 mos. 83% breast-fed for more than 3 months	(1985) community case study (no data on ethnicity)	INCAP (1985) "Situacion de Salud y Nutricion del Distrito de Salud El Milagro, Area de Salud , Guatemala.
	18 months - mean duration of breastfeeding	National survey(1983)	Asoc. Pro-Bienestar de la Familia, CDC(1984) Family Planning and Maternal/Child Health Survey, Guatemala, 1983

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
I.c	not available		MSPAS, INCAP
	27.4%	Percent of children under 3 years being weighed regularly (1985-86)(rural)	Min. de Salud, INCAP(1986) Encuesta Nacional Simplificada de Salud Materno-Infantil
		Community case study (1985)	INCAP (1985) "Situacion de Salud y Nutricion del Distrito de Salud El Milagro, Area de Salud, Guatemala Sur.
	46%	-Percent of children under 5 being weighed regularly (1985)	
	70%	-Percent of children under 5 being weighed regularly who were weighed within the past 2 mo. (1985).	
	32%	-Percent of children under 5 weighed in the past 2 months.	
I.d	not available		MSPAS, INCAP
I.e		Children under 5 (1978 - rural) (wt/age)	
	12.1%	-3 s.d. Z score	INCAP (1985) Analisis Uniforme de Datos Antropometricos para Sistemas de Vigilancia Alimentario-Nutricional.
	43.6%	-2 s.d. Z score	
		-Children under 3 (1985-6) (wt/age)(rural)	Min de Salud, INCAP(1986) Encuesta Nacional Simplificada de Salud Materno-Infantil
	33.6%	-2 s.d. Z score	
I.f	not available		MSPAS, INCAP
TIER III			
Impact			
I.a and I.b		1978-NCHS (wt/age) (children 0-59 mos.)	INCAP (1985) Analisis Uniforme de Datos Antropometricos para Sistemas de Vigilancia Alimentario-Nutricional.
	47.8%	Grade I	
	26.0%	Grade II (rural area)	
	3.2%	Grade III	

INDICATOR NO.	DATA AVAILABLE		TYPE OF DATA/COMMENTS	SOURCE
	(1985-6)	(1978)	Z Scores (wt/age)	Min. de Salud, INCAP(1986) Encuesta Nacional Simplificada de Salud Materno-Infantil
	33.6%	43.6%	-2sd	
	-	12.1%	-3sd	INCAP (1985) Analisis Uniforme de Datos Antropometricos para Sistemas de Vigilancia Alimentario-Nutricional.
	(3's) (Rural)	(5's) (Rural)		
	15%		-2sd (1985) (wt/age) (children under 5) Community Case Study	INCAP (1985) "Situacion de Salud y Nu- del Distrito de Salud El Milagro, Area de Salud Guatemala Sur."
IMMUNIZATIONS TIER I				
Input				
I.a	Children all Ages		In 1985	
	119,778		-Fully vaccinated w/polio	
	143,104		-Fully vaccinated w/measles	
	120,595		-Fully vaccinated w/DPT	
	194,733		-Fully vaccinated w/BCG	
			(Cannot add these together for total no. because numbers may not reflect the same individuals).	Ministry of Public Health and Social Assistance (1985) Memoria de Labores.
	27%		Percent of all children under 5 who are fully covered (1985) - National Survey (carnet and no carnet).	
			No. of vaccine doses imported (1985):	Min. de Salud (1985) Informe Sobre el Programa PAI en Guatemala
	1 million		DPT	
	300,000		Measles	
	1 million		Polio	
	150,000		BCG	

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
2.a,b and c	7	All cases of neo-natal tetanus (1985)	MSPAS Anuario 1985 (Unidad Informatica)
	1,272	All cases of measles (1985)	
	35	All cases of polio (1985) (non-specified, paralytic and non-paralytic)	
	7	All cases of neo-natal tetanus(1985)	Min. de Salud (1985) Informe Sobre el Programa PAI de Guatemala (Epidemiologia)
	2,272	All cases of measles (1985)	
	29	All cases of polio (1985)(confirmed cases)	
TIER II			
Effectiveness			
1.a	Children 0-12 Mo.	1985 Vaccin. Campaign, phases 1 and 2:	
	112,737	Polio 1	Ministry of Public Health and Social Assistance (1985) Memoria de Labores
	19,327	Polio 3	
	58,255	Measles (doses applied)	
	111,764	DPT 1	
	48,334	DPT 2	
	19,494	DPT 3	
	65,020	BCG	
	2%	Coverage of children 12 months with all vaccinations (rural survey) (1985)	Min. de Salud, INCAP(1985)Encuesta Nacional Simplificada de Salud Materno-Infantil
	Children 0-12 mos.	No. of doses applied, vaccination campaign plus Min. of Health Immunization program: (1985)(Unidad Informatica)	Min. de Salud(1985)Anuario, 1985
	110,085	Polio 1	
	26,728	Polio 3	
	58,843	Measles	
	110,390	DPT 1	
	56,238	DPT 2	
	27,345	DPT 3	
	69,093	BCG	

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
	Children 0-12 mos.	No. of doses applied in 1985, consolidated (Epidemiologia)	Min. de Salud (1985) Informe Sobre el Programa PAI de Guatemala
	149,498	Polio 1	
	31,722	Polio 3	
	79,286	Measles	
	148,362	DPT 1	
	31,862	DPT 3	
	101,488	BCG	
	Children 0-12 mo.	Coverage (1985-86)(Rural survey)	Min. do Salud, INCAP(1986)Encuesta Nacional Simplificada de Salud Materno-Infantil
	23.4%	Polio 1	
	2.6%	Polio 3	
	5.9%	Measles	
	23.1%	DPT 1	
	8.1%	DPT 2	
	2.6%	DPT 3	
	31.6%	BCG	
	Children 0-12 mos	Coverage based on 3rd doses applied (1985) and a pop. figure of 340,097(1985)	Min. de Salud (1985)Anuario, 1985 and MSPAS/USAID/G
	7.8	Polio	
	17.3	Measles	
	8.0	DPT	
	20.3	BCG	
	Children 0-12 mos	Coverage taken from survey done by USAID with the MOH (1985):	Min. de Salud (1985) Informe de la Encuesta de Cobertura del PAI
	5.0%	Polio	
	11.0%	Measles	
	5.0%	DPT	
	41.0%	BCG	
1.b	8.0%	Percentage of women in fert. age who received 2 doses TT in last pregnancy.	Min. de Salud, INCAP(1986)Encuesta Nacional Simplificada de Salud Materno-Infantil
	80.0%	Percentage of mothers who did not receive a TT vaccine prior to their last pregnancy.	INCAP (1985) "Situacion de Salud y Nutricion del Distrito de Salud El Milagro, Area de Salud, Guatemala Sur.

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
1.c	13.4/10,000	Measles-assoc. mortality rate (children 0-60 months) (1983)	MSPAS (1985) Anuario, 1985
1.d	not available		MSPAS
TIER III			
Effectiveness			
1.a	not available		
1.b	not available		
1.c		Polio Associated	MSPAS, Anuario 1985
		1. Morbidity (1985)(per 10,000 children)	
	0.1	0-12 mos.	
	0.2	13-60 mos.	
		2. Mortality (1983 and 1982(per 10,000 children)	
	0.0	0-12 mos.	
	0.0	13-60 mos.	
	0.14	. All Ages (1971)(per 10,000 pop.)	
1.d		Measles Associated	
		1. Morbidity (1985)(per 10,000 children)	
	13.4	0-12 mos.	
	8.2	13-60 mos.	
		2. Mortality(per 10,000 children)	
	21.9	0-12 mos.(1983)	
	24.5	0-12 mos.(1984)	
	11.1	13-60 mos.(1983)	
	4.4	All ages(per 10,000 pop.)(1982)	

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
1.e		Tetanus Associated	
		1. Morbidity (1985)(per 10,000 children)	
	1.0	0-12 mos.	
	0.02	13-60 mos.	
		2. Mortality(per 10,000 children)	
	not avail.	0-12 mos.(1985)	
	not avail.	13-60 mos.(1985)	
	0.39	All ages (1971)(per 10,000 pop.)	
	0.3	All ages (1982)(per 10,000 pop.)	
1.f		Pertussis Associated	
		1. Morbidity (1985)(per 10,000 children)	
	14.8	0-12 mos.	
	47.0	13-60 mos.	
		2. Mortality	
	16.3	0-12 mos. (1982)(per 10,000 children)	
	21.0	0-12 mos. (1984)(per 10,000 live births)	
	47.0	13-60 mos. (1982)(per 10,000 children)	
	1.4	All ages (1982)(per 10,000 pop.)	
1.g		Diphteria Associated	
		1. Morbidity (1985)(per 10,000 children)	
	0.07	0-12 mos.	
	0.04	13-60 mos.	
		2.Mortality(per 10,000 children)(1985)	
	not avail.	0-12 mos.	
	not avail.	13-60 mos.	
	0.04	All ages (1971)(per 10,000 pop.)	
	0.0	All ages (1982)(per 10,000 pop.)	

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
I.h		Neonatal Tetanus Associated	
		1. Morbidity (1985)(per 10,000 children)	
	0.2	0-12 mos.	
	0.0	13-60 mos.	
	not avail.	2. Mortality(1985)	
I.I		1978-NCHS (wt/age) (children 0-59 mos.).	INCAP (1985) Analisis Uniforme de Datos Antropometricos para Sistemas de Vigilancia Alimentario-Nutricional.
	47.8%	Grade I	
	26.0%	Grado II (rural area)	
	3.2%	Grado III	
	(1985-6) (1978)	Z Scores (wt/age)	Min. de Salud, INCAP(1986)Encuesta Nacional Simplificada de Salud Materno-Infantil
	33.6% 43.6%	-2sd	
	- 12.1%	-3sd	INCAP (1985) Analisis Uniforme de Datos Antropometricos para Sistemas de Vigilancia Alimentario-Nutricional.
	(0-3's) (0-5's)		
	(Rural) (Rural)		
I.J	15%	-2sd (1985) (wt/age) (children 5) Community Case Study	INCAP (1985) "Situacion de Salud y Nu- del Distrito de Salud El Milagro, Area de de Salud Guatemala Sur
ROCAP Program Indicators			
I.	71,272	No. of Infant deaths(1985)	MSPAS/USAID/G
	79.8/1000	Infant mortality rate (1984)	MSPAS (1985) Evaluacion de las Condiciones de los Servicios de Salud Materno-Infantil Julio-Agosto, 1985 from Salud Materno-Infantil.
	67/1000	Infant mortality rate (1984)	Bureau for LA and the Caribbean.
	68.5/1000	Infant mortality rate (1985)	MSPAS Anuario 1985
	77.8/1000	Infant mortality rate (1985)	Min. de Salud, INCAP(1986)Encuesta Nacional Simplificada de Salud Materno-Infantil

INDICATOR NO.	DATA AVAILABLE		TYPE OF DATA/COMMENTS	SOURCE
2.			1978-NCHS (wt/age) (children 0-59 mos.).	INCAP (1985) Analisis Uniforme de Datos Antropometricos para Sistemas de Vigilancia Alimentario-Nutricional.
	47.8%		Grade I	
	26.0%		Grade II (rural area)	
	3.2%		Grade III	
	(1985-6)	(1978)	Z Scores (wt/age)	Min. de Salud, INCAP(1986)Encuesta Nacional Simplificada de Salud Materno-Infantil INCAP (1985) Analisis Uniforme de Datos Antropometricos para Sistemas de Vigilancia Alimentario-Nutricional.
	33.6%	43.6%	-2sd	
	-	12.1%	-3sd	
	(0-3's)	(0-5's)		
	(Nation)	(Rural)		
	15%		-2sd (1985) (wt/age) (children 0-5) Community Case Study	INCAP (1985) "Situacion de Salud y Nu- del Distrito de Salud El Milagro, Area de Salud Guatemala Sur."
3.			See program evaluations	
4.			No INCAP training in ORT in 1985	INCAP
			Efficiency levels of training-all subjects	
	67%		Percent efficiency of training in health centers	Ministry of Public Health and Social Assistance (1985) Evaluacion de las Condiciones de Eficiencia Materno-Infantil
	29-22%		Percent efficiency of training in health posts	
	48%		Percent efficiency of training in health areas, peds. and obstetrics.	
	To be trained	Actually Trained	Ministry of Health: Immunizations (1985)	USAID/G of Min. of Health
	80	80	physicians	
	675	675	other health personnel	
	4648	3951	vol/community health workers	

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
	25	INCAP training- nutrition(1985)(all levels)	INCAP(1986)
5.		See program evaluations	
6.		See program evaluations for avail. of knowledge	
7.	700,000 - 1 litre Some	USAID/G Private sector - Lab. Bonin (1 liter) (Does not include UNICEF)	USAID/G USAID/ROCAP(1986)"Consultancy visit on ORS Production and Distribution in Guatemala, Honduras and Panama"
8.		See program evaluations	
9.	7.4% - ORS 1.4% - ORT	Perc. of cases of diarrhea in past 2 wks treated w/ORT (1983) (children 0-59 mos)	Asoc. Pro-Bienestar de la Familia, CDC(1984) Family Planning and Maternal/Child Health Survey, Guatemala, 1983
	0.6%	Percent of cases of diarrhea in the past 2 weeks which were treated w/ORS (1985) (children under 59 mos)	INCAP (1986) "Situacion de Salud y Nutricion del Distrito de Salud y Nutricion de Salud del Milagro, Area de Salud de Guatemala Sur".
	3.5% - ORS 3.7% - suero casero	Treatment of diarrhea in past 2 weeks (Children under 3) (1985-86)	Min. de Salud, INCAP(1986)Encuesta Nacional Simplificada de Salud y Nutricion Materno Infantil

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EL SALVADOR

ANNEX

C

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CHILD SURVIVAL BASELINE 1985
EL SALVADOR
TIER I

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
Demographic			
1-1.1	5 million	1985 data based on pop. projections	Ministry of Planning (MIPLAN) (1985) Estimaciones y Proyecciones de Población
1-1.2	800,000 (0-12mo= 183,011) (1-4yrs= 652,168)	Children 0-59 months (1985) also based on population projections. (*There is no breakdown further by age at the Ministry of Health.)	Ministry of Planning (MIPLAN) (1985) Estimaciones y Proyecciones de Población
1-1.3	1,243,681 294,983 252,113 209,959 165,980 129,546 105,049 86,051	15-49 yrs.(1985) based on pop. projections 15-19 years 20-24 years 25-29 years 30-34 years 35-39 years 40-44 years 45-49 years	Centro Latinoamericano de Demografía (CELADE) (1982) Boletin Demográfico.
1-1.4	150,000	1985 estimate based on a birth rate of 30/1,000 population. (Estimates range from 30 to 33.4 (1982) from same source depending on the denominator (pop. projection used). This is number of births, not the same as number of live births.)	Ministry of Public Health and Social Assistance (1986) Memoria 85-86: Supervivencia Infantil (from Dirección General de Estadisticas y Censos).

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
1-1.5	67.7/1000	Infant mortality rate (1985)	Encuesta Nacional de Salud Familiar (FESAL) (1985) USAID/El Salvador.
	35.1/1000	Infant mortality rate (1984) taken from Dirección General de Estadisticas y Censos.	Ministry of Public Health and Social Assistance (1986) Memoria 85-86: Supervivencia Infantil
	75.1/1000	Infant mortality rate (1981)	
	6.8/1000	Child death rate (1981) (1-5 years)	World Bank (1983) World Tables
	23.3/1000	Probability of death (1-5 years) (1985)	Encuesta Nacional de Salud Familiar (FESAL) (1985) USAID/El Salvador
	89.4/1000	Probability of death (0-5 years) (1985)	
	38.8/1000	0-5 year old death rate in the displaced population (1985)	Baseline Survey of the Displaced (1986) USAID/El Salvador
1-1.6		Min. de Salud (1985)	
	1,531	- Physicians	Ministry of Public Health and Social Assistance (1986) Memorias 85-86: Supervivencia Infantil
	3,984	- Other health personnel (including nurses and auxiliary nurses)	
	3,580	- Voluntary/Community Health workers (including midwives, rural health workers and volunteers).	
		CESAD (1985)	CESAD (1985) Child Survival Tracking Sys Report
	5	- Physicians	
	5	- Other health personnel	
	16	- Vol./Community Health workers	

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
		Project Hope (1985)	Project Hope (1985) Child Survival Tracking System Report
	3	-. Physicians	
	6	- Other health personnel	
	41	- Vol./Community Health workers	
	63	- Other	
		CONADES (1985)	CONADES (1985) Child Survival Tracking System Report
	4	- Physicians	
	15	- Other health workers	
1-1.7		Min. of Health (1985)	Ministry of Public Health and Social Assistance (1986) Memorias 85-86; Supervivencia Infantil
	14	- hospitals	
	12	- health centers	
	100	- health units	
	174	- health posts	
	33	- community posts	
	9	- health dispensaries	
	769	- midwives (home visits)	
	248	- rural health workers (home visits)	
	2,563	- volunteers (home visits)	
		CESAD (1985)	CESAD (1985) Child Survival Tracking System Report
	108	- facilities	
		Project Hope (1985)	Project Hope (1985) Child Survival Tracking System Report
	74	- facilities	
		CESAD (1985)	CESAD (1985) Child Survival Tracking System Report
	30	- facilities	

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
ORT			
2-1.1	(liter) 1,600,000	Public Sector (1985) Number of liter size packets used by the Ministry of Health (from UNICEF, mainly Italian Government, USAID - imported, and some from local producers.)	Project Support File (1986) USAID/ES
	20,000	CONADES (1985) liter packets locally prod.	CONADES (1986) Child Survival Tracking System Report
	No dist'n or production data.	Private Sector (1986) Laboratorios y Drogueria Lainez (200 ml solution. Capable of 30,000 packet production per day).	Project Support File (1986) USAID/ES
	(half liter) 156,000/yr (1/4 liter) 165,000/yr	Laboratorios Lopez (annual production)	
	(liter) 360,000/yr	Laboratorios Arsal (annual production)	
	(1/4 liter) 300,000/yr	Industrias Quimicas (sold in dissolved-liquid-form. Also sell salts in packets, but no data is given).	
	18,000	CESAD (1985) liter packets imported and locally produced	CESAD (1986) Child Survival Tracking System Report

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
	21,000	Project Hope (1985) liter packets imported	Project Hope (1986) Child Survival Tracking System Report
2-1.2	US$.24	CONADES (1985)	CONADES (1986) Child Survival Tracking System Report
2-1.3	nothing	Public and private voluntary sector.	Ministry of Public Health and Social Assistance. Project Hope, CESAD, CONADES
	(liter) US$ .68 (1/4 liter) US$ .29	Laboratorios Arsal Industrias Quimicas (liquid form)	Project Support (1986) USAID/El Salvador
2-1.4		Nos. to be trained by the Ministry to work in diarrheal disease control (1985):	Ministry of Public Health and Social Assistance, Pan American Health Organization, Nutrition Institute of Central America and Panama, UNICEF (1985) Evaluación del Programa de Control de Enfermedades Diarreicas.
	250	Physicians	
	800	Other health personnel	
	1,200	Voluntary/community health workers	
	100	Other	
		Nos. actually trained by the Ministry to work in diarrheal diseases (1985):	

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
	287	Physicians	
	463	Other health personnel	
	982	Voluntary/community health workers	
	295	Other (including 210 in all categories)	
		Nos. to be trained and trained by CESAD in diarrheal disease control (1985):	CESAD(1986)Child Survival Tracking System Report
	5	Physicians	
	5	Other health personnel	
	16	Voluntary/community health workers	
		Nos. to be trained and trained by CONADES in diarrheal diseases (1985):	CONADES(1986)Child Survival Tracking System Report
	4	Physicians	
	15	Other health personnel	
		Nos. to be trained and trained by Project Hope in diarrheal diseases (1985):	Project Hope(1986)Child Survival Tracking System
	3	Physicians	
	113	Other health personnel	
	68	Vol/Community health workers	
2.1.5		(1985)	
	342	Ministry establishments	Ministry of Public Health and Social Assistance (1986) Memoria 85-86:
	3,508	and home-visit personnel	

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
	108	CESAD(1985) - facilities	CESAD(1985)Child Survival Tracking System Report
	74	Project Hope(1985) - facilities	Project Hope(1985)Child Survival Tracking System Report
	30	CESAD(1985) - facilities	CESAD(1985)Child Survival Tracking System Report
2-1.6	72.5	Percent of health facilities participating in ORS activities(1982-3) (Min. of Health)	Min. de Salud(1984)"Eval. de las Actividades de Rehidratacion Oral en las Regiones Occidental, Central y Metropolitana, Enero-Dic.,1982-1983"
	74	Project Hope(1985) - facilities	Project Hope(1985)Child Survival Tracking System Report
2-1.7	not avail.		
2-1.8	not avail.		
Immunization			
3-1.1	200,000 150,000	UNICEF procured for Min. of Health: (1985) BCG Measles (Does not include Rotary polio or vaccines provided by Italian government).	Personal communication N. Andrade, UNICEF.

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
		Doses applied: (all ages) (1985)	MSPAS (1985) Informe de Actividades.
	311,678	Measles	
	999,596	Polio	
	963,606	DPT	
	160,599	BCG	
		Project Hope procured: (1985)	Project Hope (1986) Child Survival Tracking System Report
	150	Measles	
	200	Polio	
	805	DPT	
	250	BCG	
3-1.2	No fee	Ministry of Public Health and Social Assistance (1986).	Personal communication Dr. de Nieto, Epidemiology, MSPAS.
3-1.3	5,000	Volunteer "channeling" workers (Training in immunization was weak)	UNICEF (1985). "El Salvador Immunization Campaign."
		No. of health workers to be trained and actually trained to work in immunizations	Project Hope (1986) Child Survival Tracking System Report
	3	Physicians	
	60	Other health personnel	
	41	Vol/Community health workers	
3-1.4	342	All Ministry facilities (for detail on type see Indicator No.1-1.7)	Ministry of Public Health and Social Assistance (1986) Memorias 85-86: Supervivencia Infantil.
	74	All Project Hope facilities (1985)	Project Hope (1986) Child Survival Tracking System Report

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
	2,285	Vaccination posts set up for the campaign. (No data available on private sector).	UNICEF (1985) "El Salvador Immunization Campaign".
3-1.5	342	All Ministry facilities (for detail on type see Indicator No.1-1.7)	Ministry of Public Health and Social Assistance (1986) Memorias 85-86: Supervivencia Infantil.
	74	All Project Hope facilities (1985)	Project Hope (1986) Child Survival Tracking System Report
	2,285	Vaccination posts set up for the campaign. (No data available on private sector).	UNICEF (1985) "El Salvador Immunization Campaign".
3-1.6		No detail on actual supply. 100% coverage of Ministry facilities reported by Dev. of Epidemiology.	Min. de Salud (1986)
		No. of Project Hope facilities with vaccines in inventory: (1985)	Project Hope (1986) Child Survival Tracking System Report
	16	Measles	
	16	Polio	
	16	DPT	
3-1.7		No real numbers available. This and 3-1.6 require a systems study, now being planned by the Ministry in conjunction with INCAP.	Min. de Salud (1986)
	47	No. of Project Hope facilites with operating cold chain equipment	Project Hope (1986) Child Survival Tracking System Report

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
Nutrition			
4-1.1	45	All levels of health workers (INCAP) (1985)	INCAP (1986)
		No. of health workers to be trained and trained in infant and child feeding by CONADES: (1985)	CONADES (1986) Child Survival Tracking System Report
	4	Physicians	
	15	Other health workers	
		No. of health workers to be trained and trained in infant and child feeding by Project Hope: (1985)	Project Hope (1986) Child Survival Tracking System Report
	3	Physicians	
	8	Other health workers	
	122	Vol/Community health workers	
		(UNICEF not involved in this in 1985).	Personal communication N. Andrade, UNICEF.
4-1.2	10	All levels of health workers (INCAP)	INCAP (1985)
		No. of health workers to be trained and trained in growth monitoring by CONADES: (1985)	CONADES (1986) Child Survival Tracking System Report
	4	Physicians	
	15	Other health workers	
		No. of health workers to be trained and trained in growth monitoring by Project Hope: (1985)	Project Hope (1986) Child Survival Tracking System Report
	3	Physicians	
	8	Other health workers	

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
4-1.3	not avail.		
4-1.4	4,500	Radio messages (1985) on the subject of MCH and family planning.	Ministry of Public Health and Social Assistance (1986) Memoria '85-'86: Supervivencia Infantil.
	361	No. of mothers given nutrition counseling by CONADES (1985)	CONADES (1986) Child Survival Tracking System Report
	400	No. of mothers given nutrition counseling by Project Hope (1985)	Project Hope (1986) Child Survival Tracking System Report
4-1.5	not avail.		Min. de Salud (1986)
High Risk			
5-1.1	Not applic.		
5-1.2		No. of health workers to be trained and trained in high risk births or family planning by CESAD: (1985)	CESAD (1986) Child Survival Tracking System Report
	4	Physicians	
	2	Other health workers	
		No. of health workers to be trained and trained in high risk births or family planning by Project Hope: (1985)	Project Hope (1986) Child Survival Tracking System Report
	3	Physicians	
	63	Other health workers	
	41	Vol/Community Health workers	
5.-1.3 to 5-1.5	Not applic.		

CHILD SURVIVAL BASELINE 1985
EL SALVADOR
TIERS I, II AND III and ROCAP Indicators

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
NUTRITION			
TIER I			
Output			
1.a.1	not avail.		Min. de Salud, INCAP and CONADES (1986)
	121	No. of indiv. in the community taught infant or child feeding (1985)	Project Hope (1986) Child Survival Tracking System Report
		(UNICEF not involved in 1985)	Personal Communication, UNICEF
1.a.2	not avail.		Min. de Salud, INCAP, CONADES, Proj. Hope
TIER II			
Effectiveness			
1.a	Estim. of 60%	Percent of health personnel demonstrating knowledge on nutrition subjects including breastfeeding and weaning (1985).	Ministry of Public Health and Social Assistance (MSPAS) (1986) Estudio Sobre Conocimientos, Actitudes y Practicas de Lactancia Materna
1.b	79%	Percent of children who were breastfed for more than 6 months of age. (1981)	Centro de Apoyo de Lactancia Materna (1981) "Estudio de Base de la Situación de la Lactancia Materna en El Salvador"
	12 mos.	Average duration of breastfeeding. (No data available on lactation plus solid foods at 6 months) (1981).	
1.c	not avail.		
1.d	not avail.		

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
1.e	17.9%	(1978 Survey) expressed as NCHS weight for age Z score - 2 sd	INCAP (1985) Analisis Uniforme de Datos Antroprometricos para Sistemas de Vigilancia Alimentario - Nutricional.
1.f	not avail.		Min. de Salud, CONADES, Proj. Hope (1986)
TIER III			
Impact			
1.a		Percent of children 0-59 mos with weight/ for age def. of: (1978) (Z score, NCHS)	INCAP (1985) Analisis Uniforme de Datos Antroprometricos para Sistemas de Vigilancia Alimentario - Nutricional.
	15.0%	-2 sd. (moderate)	
	2.9%	-3 sd. (severe)	
		Percent of children 0-59 mos with weight/ age def. of: (1978) (NCHS)	
	42.8%	Grade I (mild)	
	10.0%	Grade II (moderate)	
	0.5%	Grade III (severe)	
ORT			
TIER I			
Outputs			
1.a	2,558	Community persons taught about diarrheal control and prevention (in 157 sessions): in MSPAS facilities (1985).	Ministry of Public Health and Social Assistance (1986) Memorias: Sobrevivencia Infantil.
	28,125	Radio spots (1985)	
	1,800	TV spots (1985)	
	1,327	No. of individuals in the community taught ORT by CONADES (1985)	CONADES (1986) Child Survival Tracking System Report
	1,584	No. of individuals in the community taught ORT by CESAD (1985)	CESAD (1986) Child Survival Tracking System Report

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
2.a	18,000	Cases of dehydration (primarily moderate) attended in MSPAS facilities (1984) (all ages).	Ministry of Public Health and Social Assistance, PAHO, INCAP, UNICEF (1985) Evaluacion del Programa de Control de Enfermedades Diarreicas.
	63	No. of cases of severe dehydration seen at Project Hope facilities (1985)	Project Hope (1986) Child Survival Tracking System Report
TIER II			
Effectivenes			
1.a	65.2	Percent of CESAD health workers demonstrat- ORT knowledge and skills (1985)	CESAD (1986) Child Survival Tracking System Report
		Project Hope and CONADES report 100 perc. of health workers demonstrating ORT knowledge and skills. Real data on this indicator requires a survey of personnel. UNICEF survey data will be available soon.	Project Hope, CONADES (1986) Child Survival Tracking System Report
1.b	72.4%	Percent of displaced pop. with knowledge of ORS (1985)	USAID/El Salvador (1986) Baseline Survey of the Displaced Population.
	20.0	Percent of individuals with knowledge of ORT (estimate) (1985)	Project Hope (1986) Child Survival Tracking System Report
	96%	Percent of mothers with knowledge of ORS (1986) nation-wide survey	Min. de Salud (1986) Estudio Sobre Salud Infantil y Comunicación (preliminary results).
		UNICEF survey data will be available soon.	

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
1.c	18%	Use rate for ORT (1984)	PAHO reported in statistics from Bureau for Latin America and the Caribbean, Health.
	17.7%	Use rate for ORS (1985)-displaced pop.	USAID/El Salvador (1986) Baseline Survey of the Displaced Population.
	40.0	Percent of children 0-59 mos. ever treated with ORT(1985)	Project Hope(1986)Child Survival Tracking System Report
	15%	Use rate for ORS (1986)	
1.d	44%	Percent of last cases of diarrhea in children under 5 years given ORS (1986)	Division of Epidemiology MSPAS, INCAP (1986) Estudio Sobre Salud Infantil y Comunicacion (preliminary results).
	33.5	Percent of children 0-59 mos with diarrhea in the past 2 weeks treated with ORS(1985)	Project Hope(1986)Child Survival Tracking System Report
Impact			
2.a	Estim. of 15.5/10,000	Diarrheal-associated deaths (1984) (children 0-59 months) (1226 x 10,000) 789,500	Ministry of Public Health and Social Assistance (1985) Anuario Estadistico, Direccion General de Estadisticas y Censos.
2.b	18,000 dehydrated out of 63,350 cases of diarrhea (284/1000)	1984 data from clinic records - Ministry establishments (moderate and severe). (all ages)	MSPAS, PAHO, INCAP, UNICEF (1985) Evaluacion del Programa de Control de Enfermedades Diarreicas.
	3,037 dehydrated out of 4616 cases of diarrhea (658/1000)	1984 data from rural health workers, home visits (moderate and severe). (all ages)	

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
TIER III			
Effectiveness			
1.a	21,000	Cases of dehydration and diarrhea treated with ORS (1984) (Min. of Health facilities and ARS only) (Data on program costs required as the denominator)	Same as above.
1.b	not avail.	Ministry data has cases of diarrhea attended and cases recuperated, as well as the rate of death from diarrhea. No data on severe dehydration.	
Impact			
2.a	7.47/1000	Diarrhea assoc. mortality rate in children 0-12 months (1971)	Ministry of Public Health and Social Assistance, PAHO, INCAP, UNICEF (1986) Evaluacion del Programa de Control de Enfermedades Diarreicas
2.b	2,215 / 100,000 pop'n.	Morbidity rate due to diarrhea nation-wide. (No infant-specific data is available). (1985)	Ministry of Public Health and Social Assistance (1985). Reporte Epidemiologico Semanal.
	44%	Percent of total cases of diarrhea which occurred in children under 12 mos. of age (1980)	MSPAS, PAHO, INCAP, UNICEF (1985). Evaluacion del Programa de Control de Enfermedades Diarreicas.

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
2.c	74%	Percent of total cases of diarrhea which occurred in children 0-60 months (1980).	MSPAS, PAHO, INCAP, UNICEF (1985). Evaluacion del Programa de Control de Enfermedades Diarreicas.
	4,000 / 10,000	Period prevalence of diarrheal disease (1 mo. period - October, 1986) in children 12 to 59 months of age	MSPAS, INCAP (1986) Estudio Sobre Salud Infantil y Comunicacion (preliminary results).
2.d and 2.e		Percent of children 0-59 mos with weight/ for age def. of: (1978) (Z score, NCHS)	INCAP (1985) Analisis Uniforme de Datos Antropometricos para Sistemas de Vigilancia Alimentario - Nutricional.
	15.0%	-2 sd. (moderate)	
	2.9%	-3 sd. (severe)	
		Percent of children 0-59 mos with weight/ age def. of: (1978) (NCHS)	
	42.8%	Grade I (mild)	
	10.0%	Grade II (moderate)	
	0.5%	Grade III (severe)	
IMMUNIZATIONS TIER I			
Input			
1.a		UNICEF did not contribute vaccine to MOH in 1985 - mainly came from the Italian government.	Personnal communication, N. Andrade (1986).

INDICATOR NO.	DATA AVAILABLE		TYPE OF DATA/COMMENTS	SOURCE
Impact				
2.a	52		No. of cases of neo-natal tetanus (1985) in MSPAS facilities.	MSPAS (1985) Reporte Epidemiologico Semanal.
2.b	1,413		No. of cases of measles in MSPAS facilities (1985).	
2.c	8		No. of cases of polio in MSPAS facilities (1985).	
TIER II				
Effectiveness				
1.a	12 mo.	12-59 mo.	Polio	
			First Dose	
	74,406	18,177	MSPAS facilities (1985)	
	56,536	200,537	Vaccination Campaign (1985)	
	130,942	218,714	TOTAL First Dose	Ministry of Public Health and Social Assistance (1985) Informe de Actividad E5 and "Jornadas Nacionales de Vacunacion", 1985.
			3rd. Dose	
	54,487	26,908	MSPAS facilities	
	37,731	178,959	Vaccination campaign	
	43,218	205,867	TOTAL third dose	
	12 mo.	12-59 mo.	Measles	
	54,735	33,640	MSPAS facilities (1985)	
	25,933	202,370	Vaccination Campaign (1985)	
	57,268	236,010	TOTAL Measles	
	12 mo.	12-59 mo.	DPT	
			First Dose	
	75,163	12,843	MSPAS facilities (1985)	
	187,777	56,005	Vaccination Campaign (1985)	
	262,940	68,848	TOTAL First Dose	

INDICATOR NO.	DATA AVAILABLE		TYPE OF DATA/COMMENTS	SOURCE
			2nd. Dose	
	60,559	15,049	MSPAS facilities	
	44,920	162,812	Vaccination campaign	
	105,479	177,861	TOTAL second dose	
			3rd. Dose	
	55,254	25,211	MSPAS facilities	
	36,892	164,590	Vaccination campaign	
	92,146	189,801	TOTAL third dose	
	12 Mo.	12-59 mo.	BCG	
			First Dose	
	80,127	62,196	MSPAS facilities	
	80,127	62,196	TOTAL BCG	
	12 Mo.	12 -59 mo.		
	772,120	1,159,297	TOTAL Vaccinations (1985) (Does not include tetanus DT, rabies, or typhoid)	
			No. of children under 5 yrs with: (1985)	MSPAS (1985) Informe de Actividades '85 and "Jornadas Nacionales de Vacunacion"
	249,085		. No. w/3rd polio dose completed in 1985	
	293,278		. No. w/measles given in 1985	
	281,947		. No. w/3rd. DPT dose completed in 1985	
	142,323		. No. w/BCG given in 1985	
1.b	42,779		Number of pregnant women who received 2 doses of T. toxoid in MSPAS facilities (1985).	Same as above
	3.4%		Percent of women 15-49 years.who received 2 doses tet. toxoid (1985)	Same as above
1.c	12.3/100,000		Measles associated mortality rate (all ages) (1981).	MSPAS (1984) "Numero de Muertes de Algunas Enfermedades Vacunables" from Anuario Estadistico Direccion General de Estadisticas y Censos
1.d	0.2/100,000		Neo-natal tetanus-assoc. mortality rate (all ages) (1981).	

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
TIER III Effectiveness			
1.a	not avail.		
1.b		This requires data from 1985 on: 1. Number of deaths from each disease / Total cases of each disease 2. This proportion could be applied to the number of fully vaccinated children for each illness to give the approximate number who would have died if they had got the illness.	
		The number of cases for 1985 are the following: (all ages only)	MSPAS (1985) "Reporte Epidemiologico Semanal"
	8	Polio	
	1,413	Measles	
	4	Diphteria	
	464	Pertussis	
	82	Tetanus (all kinds)	
	1,461	Tuberculosis (pulmonary	
		The number of deaths for 1985 from each of these is not available	
1.c.1		Polio	
	0.16/10,000	Morbidity rate (all ages) (1985)	All morbidity from MSPAS (1985) "Reporte Epidemiologico Semanal".
.2	0.5/100,000	Mortality rate (all ages (1981)	All mortality from MSPAS (1984) "Numero de Muertes de Algunas Enfermedades Vacunables".

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
1.d.1		Measles	
	2.8/10,000	Morbidity rate (all ages) (1985)	
.2	12.3/100,000	Mortality rate (all ages (1981)	
1.e.1		Tetanus (all types)	
	0.2/10,000	Morbidity rate (all ages) (1985)	
.2	1.0/100,000	Mortality rate (all ages) (1981)	
1.f.1		Pertussis	
	0.9/10,000	Morbidity rate (all ages) (1985)	
.2	3.0/100,000	Mortality rate (all ages) (1981)	
1.g.1		Diptheria	
	.008/10,000	Morbidity rate (all ages) (1985)	
.2	0.1/100,000	Mortality rate (all ages) (1981)	
1.h.1		Neo-Natal Tetanus	
	0.1/10,000	Morbidity rate (all ages) (1985)	
.2	0.2/100,000	Mortality rate (all ages) (1981)	
1.i and 1.j		Percent of children 0-59 mos with weight/ for age def. of: (1978) (Z score, NCHS)	INCAP (1985) Analisis Uniforme de Datos Antroprometricos para Sistemas de Vigilancia Alimentario - Nutricional.
	15.0%	-2 sd. (moderate)	
	2.9%	-3 sd. (severe)	
		Percent of children 0-59 mos with weight/ age def. of: (1978) (NCHS)	
	42.8%	Grade I (mild)	
	10.0%	Grade II (moderate)	
	0.5%	Grade III (severe)	

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
ROCAP Program Indicators:			
1.	67.7/1000	Infant mortality rate (1985)	Encuesta Nacional de Salud Familiar (FESAL) (1985) USAID/El Salvador.
	35.1/1000	Infant mortality rate (1984) taken from Dirección General de Estadisticas y Censos.	Ministry of Public Health and Social Assistance (1986) Memoria 85-86: Supervivencia Infantil
	75.1/1000	Infant mortality rate (1981)	
	6.8/1000	Child death rate (1981) (1-5 years)	World Bank (1983) World Tables
2.		Percent of children 0-59 mos with weight/ for age def. of: (1978) (Z score, NCHS)	INCAP (1985) Analisis Uniforme de Datos Antroprometricos para Sistemas de Vigilancia Alimentario - Nutricional.
	15.0%	-2 sd. (moderate)	
	2.9%	-3 sd. (severe)	
		Percent of children 0-59 mos with weight/ age def. of: (1978) (NCHS)	
	0.5%	Grade III (severe)	
3.		See program evaluations	
4.		Nos. actually trained by the Ministry to work in diarrheal diseases (1985):	
	287	Physicians	
	463	Other health personnel	
	982	Voluntary/community health workers	
	295	Other (including 210 in all categories) (Training info. from INCAP and the DP project pending).	

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
	45	No. of health workers trained by INCAP in infant feeding (all levels of workers)	INCAP (1986) Datos de Capacitacion, 1985, Programa de TRO
	10	No. of health workers trained by INCAP in growth monitoring (all levels)	
5.		See program evaluations	
6.		For availability of knowedge, see program evaluations	
		Data from community survey will be avail. early 1987	
7.	(liter) 1,600,000	Public Sector (1985) Number of liter size packets used by the Ministry of Health (from UNICEF, mainly Italian Government, USAID - imported, and some from local producers.)	Project Support File (1986) USAID/ES
	No dist'n or production data.	Private Sector (1986) Laboratorios y Drogueria Lainez (200 ml solution. Capable of 30,000 packet production per day).	
	(half liter) 156,000/yr (1/4 liter) 165,000/yr	Laboratorios Lopez (annual production)	

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
	(liter) 360,000/yr	Laboratorios Arsal (annual production)	
	(1/4 liter) 300,000/yr	Industrias Quimicas (sold in dissolved-liquid-form. Also sell salts in	
8.		See program evaluations	
9.		Results of community KAP should be avail. early 1987	
	18%	Use rate for ORT (1984)	PAHO reported in statistics from Bureau for Latin America and the Caribbean, Health.
	17.7%	Use rate for ORS (1985)-displaced pop.	USAID/El Salvador (1986) Baseline Survey of the Displaced Population.
	40.0	Percent of children 0-59 mos. ever treated with ORT(1985)	Project Hope(1986)Child Survival Tracking System Report
	15%	Use rate for ORS (1986)	
	44%	Percent of last cases of diarrhea in children under 5 years given ORS (1986)	Division of Epidemiology MSPAS, INCAP (1986) Estudio Sobre Salud Infantil y Comunicacion (preliminary results).
	33.5	Percent of children 0-59 mos with diarrhea in the past 2 weeks treated with ORS(1985)	Project Hope(1986)Child Survival Tracking System Report

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HONDURAS

ANNEX

D

CHILD SURVIVAL BASELINE, 1985
HONDURAS
TIER I

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
Demographics			
1-1.1	4.4 mil.	Population projection (1985)	Min. de Salud (1985) Boletin de Estadistica e Infor. de Salud
1-1.2	169,918	Number of children 0-11 mos. (1985)	Consejo Superior de Planif. Econ. (1980) Proyeccion de la Pobl. Total por Sexo, Municipios, Areas Regiones y Grupos de Edad
	630,851	Total no. children 12-59 mos. (1985)	
	165,036	children 12-23 mos. (1985)	
	160,147	children 24-35 mos. (1985)	
	155,265	children 36-47 mos. (1985)	
	150,403	children 48-59 mos. (1985)	
1-1.3	952,751	Number of women of reprod. age: (1985)	same as above
	237,096	15-19	
	192,591	20-24	
	154,050	25-29	
	123,664	30-34	
	96,113	35-39	
	80,760	40-44	
	68,477	45-49	
1-1.4	180,764	Number of live births (1985)	Management Sciences for Health/Hond. (1987)
		Note: This is an estimate based on infant population and infant mortality data for 1985.	
1-1.5	71-85	Indirect estim. of infant mortality rate (per 1,000 live births) (1980's)	Min. de Salud (1986) Encuesta Nacional de Salud Materno-Infantil de Honduras, 1984

78.6	Infant mortality rate (1985) (per 1,000 live births)	Min. de Salud(1986) Estudio de Linea Base para el Plan Nacional de Supervivencia Infantil
80	Projection of infant mort. (1985) (per 1,000 live births)	Min. de Salud(1985) La Terapia de Rehidratacion Oral. Evaluacion de la Experiencia en Honduras
85	Infant mortality rate(1983) (per 1,000 live births)	Min. de Salud(1986) Supervivencia Infantil
7.4	12-59 mos mortality rate(1983) (per 1,000 children)	Min. de Salud(1985) Boletin de Estadistica e Informacion de Salud
	Note: under-reporting suspected	
1-1.6	No. of health workers, (1985):	Min. de Salud(1986) Supervivencia Infantil
928	Physicians	
3,652	Other health personnel	
6,687	Vol./Comm. health workers	
1,976	Others	
	No. of health workers (1985):	Min. de Salud (1985) Informe Anual de Actividades del Ministerio de Salud Publica, 1985
928	Physicians	
3,638	Other health personnel (nurses)	
18,869	Vol./Comm. health workers	
2,686	Others	
	Note: Does not include dentists, technicians or malaria volunteers (6,474 in total)	

1-1.7		Number of public health facilities by type: (1985)	Min. de Salud (1986) Supervivencia Infantil
	506	rural health posts (CESAR)	
	120	health centers (CESAMO)	
	9	health areas, hospitals (CHA)	
	12	regional and national hospitals	
		Number of public health facilities by type: (1985)	Min. de Salud (1985) Informe Anual de de Actividades del Ministerio de Salud Publica, 1985
	501	rural health posts (CESAR)	
	113	health centers (CESAMO)	
	9	health areas, hospitals (CHA)	
	11	regional and national hospitals	
ORT			
2-1.1	500,000	Liter size packets produced by the Patronato Nacional de la Infancia (PANI) (1985)	Min. de Salud (1985) La Terapia de Rehidratacion Oral: Evaluacionde la Experiencia en Honduras
	2,500,000	Liter size packets imported (UNICEF) (Italian Govt.) (1985)	
		Note: there is also some local private sector production of salts through Laboratorio Sandoval, Drogueria Nacional, and Hondulab (not WHO formula)	USAID/ROCAP (1984) "Consultancy Visit on ORS Production and Distribution in Guatemala, Honduras, El Salvador and Panama
2-1.2	US$.16	Cost per packet, local prod. (1984)	same as above
	US$.12	Cost per packet, imported (1984)	
2-1.3	0	Price per packet charged to the consumer (public sector)	Min. de Salud (1986)

2-1.4		No. of health workers trained in ORS, diarrhea management: (to 1985)	Min. de Salud(1986) Prog.de Control de Enfermedades Diarreicas
	928	Physicians	
	3,652	Other health personnel	
	26,403	Vol./Community health workers	
	2,000	Number of health workers trained in ORT by Oct.1985 (Min. of Health)	Min. de Salud(1985) La Terapia de Rehidratacion Oral:Evaluacion de la Experiencia en Honduras
2-1.5		Number of public health facilities by type:(1985)	Min. de Salud(1986) Supervivencia Infantil
	506	rural health posts(CESAR)	
	120	health centers (CESAMO)	
	9	health areas (CHA)	
	12	hospitals	
		Number of public health facilities by type:(1985)	Min. de Salud (1985) Informe Anual de de Actividades del Ministerio de Salud Publica, 1985
	501	rural health posts(CESAR)	
	113	health centers(CESAMO)	
	9	health areas, hospitals (CHA)	
	11	regional and national hospitals	
		Note: Does not include midwives and health guardians, also distrib. points for ORT/ORS	
2-1.6		Number of public health facilities by type:(1985)	Min. de Salud(1986) Supervivencia Infantil
	506	rural health posts(CESAR)	
	120	health centers (CESAMO)	
	9	health areas (CHA)	
	12	hospitals	

	Number of public health facilities by type: (1985)	Min. de Salud (1985) Informe Anual de de Actividades del Ministerio de Salud Publica, 1985
501	rural health posts (CESAR)	
113	health centers (CESAMO)	
9	health areas, hospitals (CHA)	
11	regional and national hospitals	
	Note: Does not include midwives and health guardians, also distrib. points for ORT/ORS	
not avail.	Number of private sector distribution points for ORS (1985)	Min. de Salud (1986)
2-1.7	Percent of public health facil. with an appropriate no. of ORS packets in inventory (according to norms): (1984) (three regions)	Min. de Salud, UNICEF (1984) Evaluation of the Distribution System of Oral Rehydration Salts in Honduras
14.3	Hospitals	
18.1	Health centers	
40.0	Rural health posts	
14.6	Community personnel (12.8 perc. had no ORS on hand)	
	Note: the same evaluation found an over-adequate supply of packets in central and regional warehouses	
98.6	Percent of rural health posts (CESARES) with ORS packets in inventory (1985)	Perfil Administrativo CESAR, Sistema de Monitoreo de Proy. 522-0152. 1985
not avail.	No data on private sector	Min. de Salud (1986)

2-1.8	75	Percent of health workers who had received training in oral rehydration therapy (1985)	Min. de Salud (1985) La Terapia de Rehidratacion Oral: Evaluacion de la Experiencia en Honduras
	98.6	Percent of rural health posts (CESARES) with ORS packets in inventory (1985)	Perfil Administrativo CESAR, Sistema de Monitoreo de Proy. 522-0152. 1985
	80	Percent of health workers interviewed who had received training in diarrheal disease control (1985) (CESARES)	Same as above
	not avail.	No. data on private sector	Min. de Salud (1986)
Immunization 3-1.1		No. of vaccine doses applied (1985) (all ages):	Min. de Salud (1986) Boletin de Estadistica e Infor. de Salud
	700,800	DPT	
	187,409	Measles	
	943,279	Polio	
	244,037	BCG	
3-1.2	0	No user fee charged by the public sector for immunizations (1985)	Min. de Salud (1986)
3-1.3	10,000	Health workers (all types) trained in immunizations (1985)	Min. de Salud (1986) Programa PAI

3-1.4		Number of public health facilities by type: (1985)	Min. de Salud (1986) Supervivencia Infantil
	506	rural health posts (CESAR)	
	120	health centers (CESAMO)	
	9	health areas (CHA)	
	12	hospitals	
		Number of public health facilities by type: (1985)	Min. de Salud (1985) Informe Anual de de Actividades del Ministerio de Salud Publica, 1985
	501	rural health posts (CESAR)	
	113	health centers (CESAMO)	
	9	health areas, hospitals (CHA)	
	11	regional and national hospitals	
3-1.5		Number of public health facilities by type: (1985)	Min. de Salud (1986) Supervivencia Infantil
	506	rural health posts (CESAR)	
	120	health centers (CESAMO)	
	9	health areas (CHA)	
	12	hospitals	
		Number of public health facilities by type: (1985)	Min. de Salud (1985) Informe Anual de de Actividades del Ministerio de Salud Publica, 1985
	501	rural health posts (CESAR)	
	113	health centers (CESAMO)	
	9	health areas, hospitals (CHA)	
	11	regional and national hospitals	
3-1.6		Percent of rural health centers (CESARES) with the following vaccines in inventory (1985):	Perfil Administrativo CESAR, Sistema de Monitoreo de Proy. 522-0153. 1985
	77.14	measles	
	77.14	polio	
	75.71	DPT	
	58.57	BCG	

3-1.7	78%	Percent of health posts and centers with operating refrigerators (1984)	Min. de Salud (1985) Evaluacion del Sistema de Informacion de Cadena de Frio a Nivel Nacional: Corte Evaluativo del Primer Trimestre, Nov, 1984
Nutrition			
4-1.1	150	No. of health workers trained in nutrition-related subjects (1985)	Min. de Salud (1985) Informe Anual de Actividades, Prog. de Nutricion
	83	No. of health workers trained in maternal-child health (1985)	Min. de Salud (1985) Informes de Capacitacion 1985, Programa de Educacion Permanante, Division de Desarrollo de Recursos Humanos.
		No. of health workers trained in infant and child feeding (primarily lactation) (1985):	Informe Anual, 1985. Proyecto de Apoyo a la Lactancia Materna (PROALMA)
	197	physicians	
	169	other health personnel	
	264	vol./community health workers	
	19	other	
4-1.2	150	No. of health workers trained in nutrition-related subjects (1985)	Min. de Salud (1985) Informe Anual de Actividades, Prog. de Nutricion
	10	No. of health workers trained in growth monitoring (1985)	INCAP (1987) Datos de Capacitacion, 1985. Programa de Rehidratacion Oral, Seguimento de Crecimiento y Educacion (TRO), Division de Asistencia Tecnica
	3	No. of health workers trained in growth monitoring (1985)	Min. de Salud (1985) Health Worker Training, Division of Maternal-Child Health, 1985

4-1.3	97	Percent of pediatric scales in good condition (1986) (data for Region 3 only)	Min. de Salud (1986) "Existencia y Calidad de Equipo Antropometrico, Region No.3"
4-1.4	38	Percent of mothers having received classes on health subjects (3 health regions) (1983)	Min. de Salud, UNICEF (1985) Resultados de la Evaluacion Formativa
	64	Percent of mothers mentioning radio spots as sources of info. about health (4 health regions) (1985)	same as above
	50,590	No. of mothers given counseling/group education about lactation	Informe Anual, 1985. Proyecto de Apoyo a la Lactancia Materna (PROALMA)
4-1.5	not avail.		Min. de Salud (1986) Div. de Nutricion
High Risk			
5-1.1	not applic.		
5-1.2	150	No. of health workers trained in nutrition-related subjects (1985)	Min. de Salud (1985) Informe Anual de Actividades, Prog. de Nutricion
	40	No. of health workers trained in high risk births (1985)	Min. de Salud (1985) Health Worker Training, Division of Maternal-Child Health.
5-1.3	not applic.		
5-1.4	not applic.		
5-1.5	not applic.		

CHILD SURVIVAL BASELINE DATA 1985
HONDURAS
Tier I, II, and III and ROCAP Indicators

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
ORT			
Tier I			
Output			
1.a	not avail.		Min. de Salud(1986) Programa de Control de Enfer. Diarreicas
Impact			
2.a	not avail.		Min. de Salud(1986)
Tier II			
Effectiveness			
1.a		Percent of cases of dehydration in which ORS norms were used by health personnel in treatment: (1984) (hospitals)	Min. de Salud(1985) La Terapia de Rehidratacion Oral: Evaluacion de la Experiencia en Honduras and Min. de Salud(1984) Estudio en el Personal de Salud sobre sus Conocimientos, Actitudes y Practicas en Relacion a las Normas de la Terapia de Rehidratacion Oral
	86	Slight dehydration	
	63	Moderate	
	32	Severe	
		Percent of cases of dehydration in which ORS norms were used by health personnel in treatment: (1984) (region, area, sector)	Min. de Salud(1984) Estudio en el Personal de Salud sobre sus Conocimientos, Actitudes y Practicas en Relacion a las Normas de la Terapia de Rehidratacion Oral
	93	Slight dehydration	
	99	Moderate	
	5	Severe	

		Percent of health workers who know the norms relating to ORT/ORS (1985) (region, area, sector):	Same as above
	91	physicians	
	82	graduate nurses	
	11	coord. of continuing education	
1.b	99	Percent of families with knowledge of ORS(Litrosol)(1985) (Region I, partial)	Min. de Salud(1985) La Terapia de Rehidratacion Oral: Evaluacion de la Experience en Honduras
1.c		Percent of mothers who have used ORS (Litrosol):	Min. de Salud,UNICEF (1985)Resultados de la Evaluacion Formativa
	52	3 health regions(1983)	
	86.7	Metro. area and 3 other health regions(1985)	
	25	Percent use rate of ORT(1984)	Bureau for Latin America and the Caribbean(1986) "Health"
1.d	70.7	Percent of children under 5 with diarrhea in the past 15 days treated with ORS alone or ORS in combination with other treatment(1985)(4 regions)	Min. de Salud(1985) Resultados de la Evaluacion Formativa,Componente Educativo, Prog. de Control de Enf. Diarreicas
	44	Percent of children with diarrhea during the survey who were treated with ORS (1985)(Health Region No.2)	Min. de Salud(1985) "Informe de la Primera Investig. Operacional sobre Morbilidad por Diarrea, IRA, Vacunacion y Uso de la Terapia de Rehidratacion Oral, Region No.2"
	42.4	Percent of children with diarrhea during the survey who were treated with ORS (1985)(Health Region No.5)	Min. de Salud(1985) "Informe de la Primera Investig. Operacional sobre Morbilidad por Diarrea, IRA, Vacunacion y Uso de la Terapia de Rehidratacion Oral, Region No.5"

	50.3	Percent of children with diarrhea during the survey who were treated with ORS (1985) (Health Region No.6)	Min. de Salud (1985) "Informe de la Primera Investig. Operacional sobre Morbilidad por Diarrea, IRA, Vacunacion y Uso de la Terapia de Rehidratacion Oral, Region No.6
		Percent of children under 5 with diarrhea in the past 3 days treated with: (1984)	Min. de Salud (1986) Encuesta Nac. de Salud Materno-Infantil de Honduras, 1984
	5.9	ORS (Litrosol)	
	11.2	ORS (Litrosol) combined w/ other treatments (antibiotics, antidiarrhetics, and others)	
	30	Percent of cases of diarrhea treated at home with ORS (1983)	Min. de Salud, AED, MSH (1986) Estudio de Prefactibilidad de Mercadeo Social de Sales de Rehidratacion Oral en Honduras
	19	Percent of traditional midwives have used ORS (Litrosol) as treatment for diarrhea (or fallen fontanel) in children (1985) (case study)	Min. de Salud (1986) Estudio Operacional sobre la Partera Tradicional en el Area de Salud de Santa Barbara, Region de Salud No.3, 1985
Impact			
2.a	1.1	Diarrhea-assoc. mortality rate, children 0-59 mos (1984) (per 1,000 children)	Min. de Salud (1986) Estudio de Linea Base para el Plan Nac. de Supervivencia Infantil
	16.9	Diarrhea-assoc. mortality rate, children 0-59 mos. (1983) (per 10,000 children)	Min. de Salud (1983) Anuario Estadistico
2.b	not avail.		Min. de Salud (1986)

Tier III

Effectiveness

1.a	not avail.		
1.b	not avail.		

Impact

2.a	342.1	Diarrhea-assoc. mortality rate in children 0-12 mos (1983) (per 100,000 children)	Min. de Salud(1986) Estudio de Linea de Base para el Plan Nac. de Supervivencia Infantil
	3.53	Diarrhea-assoc. mortality rate in children 0-12 mos (1983) (per 1,000 children)	Min. de Salud (1983) Anuario Estadistico
2.b	45,904.4	Diarrhea-assoc. morbidity rate in children 0-12 mos.(1985) (78,000 cases/169,918 children x 100,000)	Min. de Salud(1985) Boletin de Estadistica e Informacion de Salud
	46,669	Diarrhea-assoc. morbidity rate in children 0-12 mos.(1985) (79,300 cases/169,918 children x 100,000)	Min. de Salud(1985) Dpto. de Epidemiologia "Enfermedades Transmisibles"
	39	Percent of children 0-12 mos. with diarrhea during the survey (November,1985) (Health Region No.2)	Min.de Salud(1985) "Informe de la Primera Investigacion Operativa sobre Morbilidad por Diarrea, IRA, Vacunacion y Uso de la Terapia de Rehidratacion Oral, Region 2"
	51.5	Percent of children 0-12 mos. with diarrhea during the survey (July,1985) (Health Region No.5)	Min.de Salud(1985) "Informe de la Primera Investigacion Operativa sobre Morbilidad por Diarrea, IRA, Vacunacion y Uso de la Terapia de Rehidratacion Oral, Region 5"
	25.2	Percent of children 0-12 mos with diarrhea in the past 2 days (1984)	Min. de Salud (1986) Encuesta Nacional de Salud Materno-Inf. de Honduras,1984

2.c	19,731	Diarrhea-assoc. morbidity rate children 0-59 mos (1985) (158,000 cases/800,769 children x 100,000)	Min. de Salud (1985) Boletin de Estadistica e Informacion de Salud
	17,477	Diarrhea-assoc. morbidity rate children 0-59 mos (1985) (per 100,000 children)	Min. de Salud (1986) Estudio de Linea de Base para el Plan Nac. de Supervivencia Inf.
	4,462.1	Diarrhea-assoc. morbidity (1985) (all ages) (per 100,000 pop.)	Min. de Salud (1986) Supervivencia Infantil
	29	Percent of children 0-59 mos. with diarrea during the survey (November, 1985) (Health Region No.2)	Min. de Salud (1985) "Informe de la Primera Investig. Operativa sobre morbilidad por Diarrea, IRA, Vacunacion y Uso de la Rehidratacion Oral, Region No.2"
	47.1	Percent of children 0-59 mos. with diarrea during the survey (July, 1985) (Health Region No.5)	Min. de Salud (1985) "Informe de la Primera Investig. Operativa sobre morbilidad por Diarrea, IRA, Vacunacion y Uso de la Rehidratacion Oral, Region No.5"
	38.3	Percent of children 0-59 mos. with diarrea during the survey (November, 1985) (Health Region No.6)	Min. de Salud (1985) "Informe de la Primera Investig. Operativa sobre morbilidad por Diarrea, IRA, Vacunacion y Uso de la Rehidratacion Oral, Region No.6"
	20.1	Percent of children under 5 with diarrhea in the past 2 days (1984)	Min. de Salud (1986) Encuesta Nacional de Salud Materno-Inf. de Honduras, 1984
		Note: Diarrheal morbidity peaked from May 20 -Aug. 26 (1986)	Min. de Salud (1986) "Weekly Reports, Prog. PAI"

2.d		Percent of children 0-59 mos with weight/age deficiencies of: (1985)	Min. de Salud (1985) "Enfermedades Transmisibles"
	3.9	Grade I	
	1.9	Grade II	
	0.6	Grade III	
		Note: data above is from Min. of Health facilities	
		Percent of children 0-59 mos with weight/age deficiencies of: (1984)	Min. de Salud (1986) Estudio de Linea Base para el Plan Nacional de Supervivencia Infantil
	72.5	all grades	
		Percent of children 0-59 mos with weight/age deficiencies of: (1984)	UNICEF (1986) "Basic Data"
	31	all grades	
	29	mild or moderate	
	2	severe	
		Percent of children 0-59 mos with weight/age deficiencies of: (1966) (NCHS)	INCAP (1985) Analisis Uniforme de Datos Antropometricos para Sistemas de Vigilancia Alimentario Nutricional
	43.1	Grade I	
	18.4	Grade II	
	1.3	Grade III	
		Percent of children 0-59 mos with weight/age deficiencies: (1966) (Z score, NCHS)	same as above
	21.0	-2.0 to -2.9 (moderate)	
	7.5	-3.0 (severe)	
2.e	0.6	Percent of children 0-59 mos with Grade III weight/age deficiencies (1985)	Min. de Salud (1986) Estudio de Linea Base para el Plan Nac. de Supervivencia Inf.
	1.3	Percent of children 0-59 mos with Grade III weight/age deficiency (1966) (NCHS)	INCAP (1985) Analisis Uniforme de Datos Antropometricos para Sistemas de Vigilancia Alimentario Nutricional

	7.5	Percent of children 0-59 mos with severe weight/age def. (Z score of over -3.0, NCHS)	same as above
	2	Percent of children 0-59 mos with severe weight/age deficiency (1984)	UNICEF (1986) "Basic Data"
Immunization			
Tier I			
Input			
1.a		No. of vaccine doses applied (1985) (all ages):	Min. de Salud (1986) Boletin de Estadistica e Infor. de Salud
	700,800	DPT	
	187,409	Measles	
	943,279	Polio	
	244,037	BCG	
Impact			
2.a	17	No. of cases of neonatal tet. (1985)	Min. de Salud (1986) "Enfermedades Transmisibles"
2.b	6,476	No. of cases of measles (1985)	same as above
2.c	4	No. of cases of polio (1985)	same as above
Tier II			
Effectiveness			
1.a		No. of doses received by children 0-12 mos.: (1985)	Min. de Salud (1985) Boletin de Estadistica e Infor. de Salud
	147,983	Polio 1	
	117,870	Polio 3	
	107,162	Measles	
	156,077	DPT 1	
	137,458	DPT 2	
	119,245	DPT 3	
	132,505	BCG	

	Percent of children 0-12 mos with full coverage: (1985)	Min. de Salud (1986) Supervivencia Infantil and (1985) Boletin de Estad. e Infor. de Salud
58	Polio	
53	Measles	
58	DPT	
65	BCG	
	Note: Calculations based on doses applied and a 0-12 mos. population total of 203,000 for 1985	
	Percent of children 0-12 mos who had been vaccinated with: (1985) (Region No. 2 only)	Min. de Salud (1985) "Informe de la Primera Investig. Operativa sobre Morbilidad por Diarrea, IRA, Vacunacion y Uso de la Terapia de Rehidratacion Oral, Region No.2
24	Polio	
17	Measles	
22	DPT	
47	BCG	
21.8	Percent of children 0-12 mos who had been fully vaccinated: (1985) (Region No. 5 only) (1 BCG, 1 measles, and 3 DPT and polio)	Min. de Saluid (1985) "Informe de la Primera Investig. Operativa sobre Morbilidad por Diarrea, IRA, Vacunacion y Uso de la Terapia de Rehidratacion Oral, Region No.5
	Percent of children 0-12 mos who had been vaccinated with: (1985) (Region No. 6 only)	Min. de Salud (1985) "Informe de la Primera Investig. Operativa sobre Morbilidad por Diarrea, IRA, Vacunacion y Uso de la Terapia de Rehidratacion Oral, Region No.6
33.3	Polio	
28	Measles	
30.9	DPT	
39.6	BCG	
	Percent of children 0-12 mos with adequate coverage: (in accordance with norms) (1984)	Min. de Salud (1986) Encuesta Nacional de Salud Materno-Inf. de Honduras, 1984
72.8	Polio	
47.1	Measles	
34.1	DPT	
35.0	BCG	
1.b 27,255	No. of 2nd doses of tetanus toxoid given to pregnant women (1985)	Min. de Salud (1985) Boletin de Estadistica e Infor. de Salud

	63.2	Percent of women who received at least 2 doses of tetanus toxoid in their pregnancies (1985) (case study)	Min. de Salud (1986) Estudio Operacional sobre la Partera Tradicional en el Area de Salud de Santa Barbara, Region de Salud No. 3, 1985
	9.7	Percent of pregnant women who received the second dose of tetanus toxoid (1984)	Min. de Salud (1986) Estudio de Linea Base para el Plan Nac. de Supervivencia Infantil
	11	Percent of pregnant women immunized against tetanus (1984)	UNICEF (1986) "Basic Data"
	21.8	Percent of women whose last birth occurred between 1979-1984 and who received a 2nd dose tetanus toxoid (1984)	Min. de Salud (1986) Encuesta Nac. de Salud Materno-Infantil de Honduras, 1984
1.c	Not available	Measles-assoc. mortality, children 0-59 mos.	
1.d	Not available	Neo-natal tetanus-assoc. mortality, children 0-59 mos.	

Tier III
Effectiveness

1.a	not avail.		
1.b	not avail.		
1.c.1	0	Polio-assoc. morbidity rate in children 0-12 mos. (1985)	Min. de Salud (1985) "Enfermedades Transmisibles"
	0.5	Polio-assoc. morbidity rate in children 13-59 mos. (1985) (3 cases/630,851 children 13-59 mos. x 100,000)	same as above
	0.1	Polio-assoc. morbidity (1985) (all ages) (per 100,000 pop.)	Min. de Salud (1986) Supervivencia Infantil

1.d.1	663.3	Measles-assoc. morbidity rate in children 0-12 mos.(1985) (1,127 cases/169,918 children x 100,000)	Min. de Salud(1985) "Enfermedades Transmisibles"
	271.5	Measles-assoc. morbidity rate in children 13-59 mos.(1985) (1,713 cases/630,851 children x 100,000)	same as above
	148.1	Measles-assoc. morbidity(1985) (all ages) (per 100,000 pop.)	same as above
	8.2	Measles-assoc. mortality rate in children 0-12 mos. (1983) (per 100,000 children).	Min. de Salud (1983) Anuario Estadistico
1.e.1	0.6	Tetanus-assoc. morbidity rate in children 0-12 mos.1(1985) (1 case/169,851 children x 100,000)	Min. de Salud(1985) "Enfermedades Transmisibles"
	0.3	Tetanus-assoc. morbidity rate in children 13-59 mos.(1985) (2 cases/630,851 children x 100,000)	same as above
	0.7	Tetanus-assoc. morbidity rate (excludes neonatal tet.) (per 100,000 pop) (1985) (all ages)	Min. de Salud(1985) Boletin de Estadistica e Infor. de Salud
	0.6	Tetanus-assoc. mortality rate in children 0-12 mos.(1983) (per 100,000 children)	Min. de Salud (1983) Anuario Estadistico
1.f.1	55.3	Pertussis-assoc. morbidity rate in children 0-12 mos. (94/169,918 children x 100, 000)	Min. de Salud(1985) "Enfermedades Transmisibles"

	11.7	Pertussis-assoc. morbidity rate in children 13-59 mos. (74 cases/630,851 children x 100,000)	same as above
	7.7	Pertussis-assoc. morbidity (1985) (all ages) (Per 100,000 pop.)	same as above
	32.4	Pertussis-assoc. mortality rate in children 0-12 mos. (1983) (per 100,000 children)	Min. de Salud (1983) Anuario Estadistico
1.g.1	0	Diphtheria-assoc. morbidity rate (1985) (per 100,000 pop.) (all ages)	same as above
1.h.1	10.0	Neonatal tetanus-assoc. morbidity rate in children 0-12 mos. (1985) (17 cases/169,918 children x 100,000)	"Min. de Salud (1985) "Enfermedades Transmisibles
	0.4	Neonatal tetanus-assoc. morbidity rate (1985) (all ages) (per 100,000 pop.)	same as above
1.i		Percent of children 0-59 mos with weight/age deficiencies of: (1985)	Min. de Salud (1985) "Enfermedades Transmisibles"
	3.9	Grade I	
	1.9	Grade II	
	0.6	Grade III	
		Note: data above is from Min. of Health facilities	
		Percent of children 0-59 mos with weight/age deficiencies of: (1984)	Min. de Salud (1986) Estudio de Linea Base para el Plan Nacional de Supervivencia Infantil
	72.5	all grades	

		Percent of children 0-59 mos with weight/age deficiencies of: (1984)	UNICEF (1986) "Basic Data"
	31	all grades	
	29	mild or moderate	
	2	severe	
		Percent of children 0-59 mos with weight/age deficiencies of: (1966) (NCHS)	INCAP (1985) Analisis Uniforme de Datos Antropometricos para Sistemas de Vigilancia Alimentario Nutricional
	43.1	Grade I	
	18.4	Grade II	
	1.3	Grade III	
		Percent of children 0-59 mos with weight/age deficiencies: (1966) (Z score, NCHS)	same as above
	21.0	-2.0 to -2.9 (moderate)	
	7.5	-3.0 (severe)	
1.j	0.6	Percent of children 0-59 mos with Grade III weight/age deficiencies (1985)	Min. de Salud (1986) Estudio de Linea Base para el Plan Nac. de Supervivencia Inf.
	1.3	Percent of children 0-59 mos. with Grade III weight/age deficiency (1966) (NCHS)	INCAP (1985) Analisis Uniforme de Datos Antropometricos para Sistemas de Vigilancia Alimentario Nutricional
	7.5	Percent of children 0-59 mos with severe weight/age def. (Z score of over -3.0, NCHS)	same as above
	2	Percent of children 0-59 mos with severe weight/age deficiency (1984)	UNICEF (1986) "Basic Data"

Nutrition Tier I Output 1.a.1 and 2	245	No. of health facililities providing community nutrition education as part of the supplementary feeding prog. (1985)	Min. de Salud(1985) Informe Anual de Actividades, Prog. de Nutricion
Tier II Effectiveness 1.a	not avail.		Min. de Salud(1986) Div. de Nutricion
1.b	70.7	Percent of women with children under 2 yrs who gave breastmilk and other foods (coffee, juices, thick broths, purees or solid foods) to their children at 6-8 mos. (1984)	Min. de Salud(1986) Encuesta Nacional de Salud Materno-Infantil de Honduras
		Percent of women with children under 2 who breastfed: (1984)	same as above
	8.7	Urban	
	79.3	Rural	
		Average duration of breastfeeding: (1984)	Min. de Salud(1986) Estudio de Linea Base para el Plan Nac. de Supervivencia Infantil
	11.7	Urban	
	19.0	Rural	
	16.2	National	
1.c	not avail.		Min. de Salud(1986)
1.d	not avail.		Min. de Salud(1986)
1.e	0.6	Percent of children 0-59 mos with Grade III weight/age deficiencies (1985)	Min. de Salud(1986) Estudio de Linea Base para el Plan Nac. de Supervivencia Inf.

	1.3	Percent of children 0-59 mos with Grade III weight/age deficiency (1966) (NCHS)	INCAP (1985) Analisis Uniforme de Datos Antropometricos para Sistemas de Vigilancia Alimentario Nutricional
		Percent of children 0-59 mos with weight/age deficiencies: (1966) (Z score, NCHS)	same as above
	21.0	-2.0 to -2.9 (moderate)	
	7.5	-3.0 (severe)	
	2	Percent of children 0-59 mos with severe weight/age deficiency (1984)	UNICEF (1986) "Basic Data"
1.f	not avail.		Min. de Salud (1986)
Tier III			
Impact			
1.a		Percent of children 0-59 mos with weight/age deficiencies of: (1985)	Min. de Salud (1985) "Enfermedades Transmisibles"
	3.9	Grade I	
	1.9	Grade II	
	0.6	Grade III	
		Note: data above is from Min. of Health facilities	
		Percent of children 0-59 mos with weight/age deficiencies of: (1984)	Min. de Salud (1986) Estudio de Linea Base para el Plan Nacional de Supervivencia Infantil
	72.5	all grades	
		Percent of children 0-59 mos with weight/age deficiencies of: (1984)	UNICEF (1986) "Basic Data"
	31	all grades	
	29	mild or moderate	
	2	severe	

		Percent of children 0-59 mos with weight/age deficiencies of: (1966) (NCHS)	INCAP (1985) Analisis Uniforme de Datos Antropometricos para Sistemas de Vigilancia Alimentario Nutricional
	43.1	Grade I	
	18.4	Grade II	
	1.3	Grade III	
		Percent of children 0-59 mos with weight/age deficiencies: (1966) (Z score, NCHS)	same as above
	21.0	-2.0 to -2.9 (moderate)	
	7.5	-3.0 (severe)	
1.b	0.6	Percent of children 0-59 mos with Grade III weight/age deficiencies (1985)	Min. de Salud (1986) Estudio de Linea Base para el Plan Nac. de Supervivencia Inf.
	1.3	Percent of children 0-59 mos with Grade III weight/age deficiency (1966) (NCHS)	INCAP (1985) Analisis Uniforme de Datos Antropometricos para Sistemas de Vigilancia Alimentario Nutricional
	7.5	Percent of children 0-59 mos with severe weight/age def. (Z score of over -3.0, NCHS)	same as above
	2	Percent of children 0-59 mos with severe weight/age deficiency (1984)	UNICEF (1986) "Basic Data"
ROCAP Program indicators			
1.	71-85	Indirect estim. of infant mortality rate (per 1,000 live births) (1980's)	Min. de Salud (1986) Encuesta Nacional de Salud Materno-Infantil de Honduras, 1984
	78.6	Infant mortality rate (1985) (per 1,000 live births)	Min. de Salud (1986) Estudio de Linea Base para el Plan Nacional de Supervivencia Infantil

	80	Projection of infant mort. (1985) (per 1,000 live births)	Min. de Salud(1985) La Terapia de Rehidratacion Oral. Evaluacion de la Experiencia en Honduras
	85	Infant mortality rate(1983) (per 1,000 live births)	Min. de Salud(1986) Supervivencia Infantil
	7.4	12-59 mos mortality rate(1983) (per 1,000 children)	Min. de Salud(1985) Boletin de Estadistica e Informacion de Salud
2.	0.6	Percent of children 0-59 mos with Grade III weight/age deficiencies (1985)	Min. de Salud(1986) Estudio de Linea Base para el Plan Nac. de Supervivencia Inf.
	1.3	Percent of children 0-59 mos with Grade III weight/age deficiency(1966) (NCHS)	INCAP(1985) Analisis Uniforme de Datos Antropometricos para Sistemas de Vigilancia Alimentario Nutricional
		Percent of children 0-59 mos with severe weight/age def. (Z score, NCHS)	same as above
	21.0	-2.0 to -2.9 (moderate)	
	7.5	-3.0 (severe)	
	2	Percent of children 0-59 mos with severe weight/age deficiency(1984)	UNICEF(1986) "Basic Data"
3.		Available from program evaluations?	
4.		No. of health workers trained in ORS, diarrhea management: (1981-1985)	Min. de Salud(1986) Prog. de Control de Enfermedades Diarreicas
	928	Physicians	
	3,652	Other health personnel	
	26,403	Vol./Community health workers	
	2,000	Number of health workers trained in ORT by Oct.1985 (Min. of Health)	Min. de Salud(1985) La Terapia de Rehidratacion Oral:Evaluacion de la Experience en Honduras

83	No. of health workers trained in maternal-child health (1985)	Min. de Salud (1985) Informes de Capacitacion 1985, Programa de Educacion Permanante, Division de Desarrollo de Recursos Humanos.
	No. of health workers trained in infant and child feeding (primarily lactation) (1985):	Informe Anual, 1985. Proyecto de Apoyo a la Lactancia Materna (PROALMA)
197	physicians	
169	other health personnel	
264	vol./community health workers	
19	other	
150	No. of health workers trained in nutrition-related subjects (1985)	Min. de Salud (1985) Informe Anual de Actividades, Prog. de Nutricion
10	No. of health workers trained in growth monitoring (1985)	INCAP (1987) Datos de Capacitacion, 1985 Programa de Rehidratacion Oral, Seguimento de Crecimiento y Educacion (TRO).
3	No. of health workers trained in growth monitoring (1985)	Min. de Salud (1985) Health Worker Training, Division of Maternal-Child Health, 1985
5.	Avail. from prog. evaluations?	
6.	Percent of mothers having heard radio messages about diarrhea management from: (4 regions)	Min. de Salud (1986) Resultados de la Evaluacion Formativa, Componente Educ., Prog. CED
83	radio	
4	posters	
1.6	television	
0.6	newspapers	
0.3	pamphlets	
	No data avail. on low birthweight info. at the community level	
7. 500,000	Liter size packets produced by the Patronato Nacional de la Infancia (PANI) (1985)	Min. de Salud (1985) La Terapia de Rehidratacion Oral: Evaluacion de la Experience en Honduras

	2,500,000	Liter size packets imported (UNICEF) (Italian Govt.) (1985)	
		Note: there is also some local private sector production of salts through Laboratorio Sandoval, Drogueria Nacional, and Hondulab (not WHO formula)	USAID/ROCAP (1984) "Consultancy Visit on ORS Production and Distribution in Guatemala, Honduras, El Salvador and Panama"
8.		Avail. from prog. evaluations	
9.	31.8	Percent of mothers who suspend food when the child has diarrhea (1985) (4 health regions)	Min. de Salud (1986) Resultados de la Eval. Formativa, Componente Educativo, Prog. CED
	31.8	Percent of mothers who think breastmilk is the best food for children when they have diarrhea (1985) (4 health regions)	same as above
		Percent of mothers who have used ORS (Litrosol):	Min. de Salud, UNICEF (1985) Resultados de la Evaluacion Formativa
	52	3 health regions (1983)	
	86.7	Metro. area and 3 other health regions (1985)	
	25	Percent use rate of ORT (1984)	Bureau for Latin America and the Caribbean (1986) "Health"
	70.7	Percent of children under 5 with diarrhea in the past 15 days treated with ORS alone or ORS in combination with other treatment (1985) (4 regions)	Min. de Salud (1985) Resultados de la Evaluacion Formativa, Componente Educativo, Prog. de Control de Enf. Diarreicas

44	Percent of children with diarrhea during the survey who were treated with ORS (1985) (Health Region No.2)	Min. de Salud(1985) "Informe de la Primera Investig. Operacional sobre Morbilidad por Diarrea, IRA, Vacunacion y Uso de la Terapia de Rehidratacion Oral, Region No.2"
42.4	Percent of children with diarrhea during the survey who were treated with ORS (1985) (Health Region No.5)	Min. de Salud(1985) "Informe de la Primera Investig. Operacional sobre Morbilidad por Diarrea, IRA, Vacunacion y Uso de la Terapia de Rehidratacion Oral, Region No.5"
50.3	Percent of children with diarrhea during the survey who were treated with ORS (1985) (Health Region No.6)	Min. de Salud(1985) "Informe de la Primera Investig. Operacional sobre Morbilidad por Diarrea, IRA, Vacunacion y Uso de la Terapia de Rehidratacion Oral, Region No.6
	Percent of children under 5 with diarrhea in the past 3 days treated with: (1984)	Min. de Salud(1986) Encuesta Nac. de Salud Materno-Infantil de Honduras, 1984
5.9	ORS(Litrosol)	
11.2	ORS(Litrosol)combined w/ other treatments(antibiotics, antidiarrhetics, and others)	
30	Percent of cases of diarrhea treated at home with ORS(1983)	Min. de Salud, MSH(1986) Estudio de Prefactibilidad de Mercadeo Social de Sales de Rehidratacion Oral en Honduras
19	Percent of traditional midwives have used ORS(Litrosol) as treatment for diarrhea (or fallen fontanel) in children(1985) (case study)	Min. de Salud(1986) Estudio Operacional sobre la Partera Tradicional en el Area de Salud de Santa Barbara,Region de Salud No.3,1985

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COSTA RICA

ANNEX

E

CHILD SURVIVAL BASELINE, 1985
COSTA RICA
TIER I

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
Demographics			
1-1.1	2.6 mil.	Population projection(1985)	Min. de Salud(1986) Div. de Estadisticas y Analisis de la Evolucion Estructural de la Poblacion y del Nivel y Evolucion de la Salud,1970-85
1-1.2		No.of children by age(1985)	
	74,856	Total children under 12 mos.	same as above
	289,496	Total children 12-59 mos.	
	74,336	12-23 mos.	
	73,299	24-35 mos.	
	71,833	36-47 mos.	
	70,028	48-59 mos.	
1.1.3		Number of women of reprod. age by age group(1985)	same as above
	665,277	Total 15-49 years	
	139,473	15-19	
	136,091	20-24	
	118,985	25-29	
	95,038	30-34	
	72,632	35-39	
	56,304	40-44	
	46,754	45-49	
1-1.4	not avail.		Min. de Salud(1986)

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
1-1.5	16.2	Infant mortality rate (1985) (per 1,000 live births)	Asoc. Demografica Costarricense (1986) Encuesta de Fecundidad y Salud
	18.4	Infant mortality rate (1984) (per 1,000 live births)	Min. de Salud, Caja Costarricense de Seguridad Social (1985) Diagnostico de la Situacion Perinatal, Costa Rica
	20.5	Under 5 yrs mortality rate (per 1,000 children) (1984)	UNICEF (1986) Annual Report
	0.7	1-4 yr. mortality rate (per 1,000 children) (1984)	Min. de Salud (1985) Anuario Estadistico
	1.0	1-4 yrs mortality rate (1983) (1984) (per 1,000 children 1-4 yrs)	Min. de Salud (1985) Salud sin Riqueza and Bureau for Latin America and the Carib bean (1985) Health
1-1.6		Number of health workers: (1985) (Min. of Health and Social Security)	Pan American Health Org. (1986) Infor. sobre Actividades de los Prog. de Control de Enfermed. Diarreicas
	2,300	Physicians	
	7,232	Other health personnel	
	515	Vol/community health workers	
		other	
		Number of health workers: (1984) (Social Security)	Min. de Salud (1984) Evaluacion de las Actividades de Control de Enf. Diarreicas en Costa Rica
	1,780	Physicians	
	4,180	Other health personnel	
		Vol/Comm. health workers	
		Other	

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
1-1.7		Health facilities (1985) Min. of Health, and Social Security systems:	Min. de Salud (1985) Anuario Estadistico Caja Costarricense de Seguridad Social (1985) Anuario Estadistico
	36	Hospitals	
	88	Health centers	
	359	Rural health posts	
	39	Mobile medical units	
	522	TOTAL	
		Health facilities (1984) Min. of Health, and Social Security systems:	Min. de Salud (1984) Evaluacion de las Actividades de Control de Enfermedades Diarreicas en Costa Rica
	29	Hospitals	
	84	Health centers	
	326	Rural health posts	
	106	Soc. Security clinics	
	5	MS subcenters	
	556	Nutrition and feeding centers	
	1,106	TOTAL	
ORT 2-1.1	0	No. of ORS packets imported	Min. de Salud (1986) "Sales de Rehidratacion Oral", Division Materno-Infantil
	500,000	Local production: (1985) Min. of Health (liter) (annual production)	
	870,000	Social Security system (8 oz.) (annual purchase)	
	some	private sector labs: OMNI, RAVEN and STEIN	

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
	159,994	Annual distribution(1983): Min. of Health(liter and 240 cc packets)	Min. de Salud(1984) Evaluacion de las Actividades de Control de Enfermedades Diarreicas en Costa Rica
	407,313	Social Security system (liter and 240 cc.)	
	6,000,000	RAVEN laboratory(240cc)	
		Note: in 1983, public health facilities were utilizing ORS produced locally and imported by UNICEF. In 1984-5, the Min. of Health began production of ORS packets in liter size.	
2-1.2	0.03 (liter) 0.06 (240cc) 0.05 (8 oz)	Min. of Health (1985) Min. of Health (1983) Social Security system(1985)	same as above
2-1.3	0	Cost to the consumer through public health system	same as above
2-1.4		Number of health workers trained in clinical management of diarrhea(up to 1986)	Pan American Health Org.(1986)"Informacion Sobre Actividades de los Programas de Control de Enfermedades Diarreicas"
	1,282	Physicians	
	1,532	Other health personnel	
	265	Vol./Comm. health workers	
	246	Other	

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
		No. of health workers trained in control of diarrheal disease(1981):	Min. de Salud(1984) Evaluacion de las Actividades de Control de Enfermedades Diarreicas en Costa Rica
	82	Physicians	
	410	Other health personnel	
	711	Vol./community health workers	
	265	Volunteer community leaders trained for community work in ORT(1982)	Min. de Salud(1986)" Informe", Div. de Materno-Infantil
	84.2	Percent of health personnel who had been trained in diarrheal disease control and ORS(1983)	Min. de Salud (1984) Evaluacion de las Actividades de Control de Enfermedades Diarreicas en Costa Rica
		Note:according to this evaluation, most ORS training of personnel took place from 1979 to 1982	
2-1.5	522	all health facilities	Min. de Salud(1986) Div. de Materno-Infantil
	265	Volunteer community leaders	
2-1.6	522	all health facilities	Min. de Salud(1986) Div. de Materno-Infantil
	265	Volunteer community leaders	
	157	Private pharmacies	
		Note: 1984 evaluation found all health services with ORS, however only 20 perc. of health personnel using ORS in diarrheal treatment. Caolin-pectin was the treatment most commonly used.	Min. de Salud(1984) Evaluacion de las Actividades de Control de Enf. Diarreicas en Costa Rica

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
2-1.7	27	Percent of personnel reporting problems obtaining sufficient supplies of ORS(1984).	same as above
		Note:provision of ORS was considered to be insufficient in 2 of the 5 health regions(1983)	same as above
2-1.8	not avail.		Min. de Salud(1986)
Immunization			
3-1.1		Number of vaccine doses applied:(1985)(all ages)	Min. de Salud(1985) Anuario Estadistico
	315,086	DPT	
	66,584	Measles	
	308,893	Polio	
	140,241	BCG	
		Note:this does not include 93,158 other vaccines applied in 1985(rabies, t.t., etc.)	
3-1.2	0	User fees not charged by public sector	Min. de Salud(1986)
3-1.3		The need for integrated training of health personnel in immunizations was identified(1984)	Min. de Salud (1985) Primera Eval. Multidisciplinaria del Prog. de Immunizaciones en Costa Rica

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
3-1.4	522	All public health facilities	Min. de Salud (1986)
3-1.5	522	All Min. of Health and Social Security facilities provide immunization services (1984)	Min. de Salud (1985) Primera Eval. Multi-disciplinaria del Prog. de Immunizaciones en Costa Rica
3-1.6		The evaluation found most health facilities to be with out sufficient immunization supplies (1984)	same as above
3-1.7		The evaluation found some health regions to be with-out adequate cold chain supplies or maintenance (1984)	same as above
4-1.1	not avail.		Min. de Salud (1986) Div. de Nutricion
4-1.2	not avail.		Min. de Salud (1986) Div. de Nutricion
4-1.3	not avail.		Min. de Salud (1986) Div. Materno-Infantil
4-1.4	13,764	Mothers given nutrition counseling (1985) (first quarter data only-all health regions)	Min. de Salud (1986) Div. de Nutricion
4-1.5	not avail.		Min. de Salud (1986) Div. de Nutricion

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
High Risk			
5-1.1	not applic.		
5-1.2	not avail.		Min. de Salud(1986) Div. Materno-Infantil
5-1.3	not applic.		
5-1.4	not applic.		
5-1.5	not applic.		

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CHILD SURVIVAL BASELINE DATA, 1985
COSTA RICA
Tier I, II, and III and ROCAP Indicators

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
ORT			
Tier I			
Output			
1.a	265	Volunteer community leaders trained for community work in ORT(1982)	Min. de Salud(1986) Informe, Div. de Materno-Infantil
Impact			
2.a	not avail.		Min. de Salud(1986)
Tier II			
Effectiveness			
1.a	62	Percent of health personnel able to adequately calculate the quantities of ORS necessary in patient treatment (1984)	Min. de Salud (1984) Evaluacion de las Actividades de Control de Enfermedades Diarreicas en Costa Rica
	68	Percent of health personnel with knowledge of ORS(1984)	same as above
1.b	not avail.		Min. de Salud(1986)
1.c	not avail.		Min. de Salud(1986)
1.d	78	Percent children under 5 with diarrhea in the past month treated with ORS(1984)	Min de Salud(1986) "Sales de Rehidratación Oral" from Evaluaction de las Actividades de Control de Enf. Diareicas en Costa Rica

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
	21	Percent use-rate of ORT (1984)	Bureau for Latin America and the Caribbean (1986) Health
Impact			
2.a	2.6	Diarrhea-assoc. mortality rate, children 0-59 mos 1984) (per 10,000 children)	Pan American Health Org. (1986) "Infor. sobre Actividades de los Prog. de control de Enfermed. Diarreicas
	0.12	Diarrhea-assoc. mortality rate, children 1-4 years (1983) (per 1,000)	Min. de Salud (1986) Estadisticas
2.b	not avail.		Min. de Salud (1986)
Tier III			
Effectiveness			
1.a	not avail.		Min. de Salud (1986)
1.b	not avail.		Min. de Salud (1986)
Impact			
2.a	1.0	Diarrhea assoc. mortality rate in children 0-12 mos. (per 1,000) (1984)	Min. de Salud (1984) Estadisticas
2.b	301.9	Diarrhea-assoc. morbidity rate, children 0-12 mos (1985) (per 10,000 children) (from outpatient facilities)	Min. de Salud (1985) Anuario Estadistico

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
	268.40	Diarrhea-assoc. morbidity rate in children 0-12 mos (1984) (per 10,000)	Min. de Salud (1986) "Sales de Rehidratacion Oral"
2.c	428.2	Diarrhea-assoc. morbidity rate, children 0-59 mos (1985) (per 10,000 children)	Pan American Health Org. (1986) "Informacion sobre Actividades de los Prog. de Control de Enferm. Diarreicas"
	2,940	Diarrhea-assoc. morbidity, children 0-59 mos, past month (1984) (per 10,000 children)	Min. de Salud (1984) Evaluacion de las Actividades de Control de Enf. Diarreicas en Costa Rica
	160.1	Diarrhea-assoc. morbidity rate, children 12-59 mos. (1985) (per 10,000) (from outpatient facilities)	Min. de Salud (1985) Anuario Estadistico
	152.15	Diarrhea-assoc. morbidity rate in children 12-59 mos (1984) (per 10,000)	same as above
	1,610	Diarrhea-assoc. morbidity rate in past week, children 0-59 mos. (per 10,000) (1985-6)	Assoc. Demografica Costarricense (1986) Encuesta de Fecundidad y Salud
	6,040	Prevalence of intestinal parasites, children 0-59 mos. (urban, 1985) (per 10,000 children 0-59 mos.) Note: primarily Giardia, E. Coli and E. Nana	Min. de Salud (1986) Div. de Nutricion

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
2.d		Percent of children under 72 mos. with weight/age deficiencies of: (1985) (from nutrition centers)	Min. de Salud (1985) Anuario Estadistico
	23.2	Grade I	
	3.5	Grade II	
	0.3	Grade III	
		Percent of children under 72 mos with weight/age deficiencies (Gomez): (1982)	Min. de Salud (1985) Encuesta Nacional de Nutricion, 1982
	30.6	Grade I	
	3.3	Grade II	
	0.3	Grade III	
		Percent of children under 72 mos with weight for age deficiencies (Z score): (1982)	same as above
	24.6	-1 to -2 standard dev.	
	6.3	under -2 standard dev.	
2.e	0.3	Percent of children under 72 mos with Grade III weight/age (Gomez) (1982)	same as above
	6.3	Percent of children under 72 mos with under -2 standard dev. (Z score, NCHS ref. measures) (1982)	same as above

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
Immunization			
Tier I			
Input			
1.a		Number of vaccine doses applied: (1985) (all ages)	Min. de Salud (1985) Anuario Estadistico
	315,086	DPT	
	66,584	Measles	
	308,893	Polio	
	140,241	BCG	
		Note: this does not include 93,158 other vaccines applied in 1985 (rabies, t.t., etc.)	
Impact			
2.a	6	Cases of tetanus (1985) (all ages)	Min. de Salud (1985) Anuario Estadistico
	7	Cases of tetanus (1984) (all ages) Note: none of these cases occurred in children under 5 years of age	same as above
2.b	1	Cases of measles (1985) (all ages)	same as above
	10	Cases of measles (1984) (all ages)	same as above
2.c	0	Cases of polio (1985)	same as above
		Note: no cases of polio in Costa Rica since 1974	

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
Tier II Effectiveness			
1.a		No. and percent of children 0-12 mos. having received: (1985)	Min. de Salud(1986) Analisis de la Evolulucion Estructural de la Poblacion y del Nivel y Evolucion de la Salud, 1970-85
	52,899 (62%)	Polio	
	1,779 (02%)	Measles	
	54,420 (65%)	DPT	
	53,030 (63%)	BCG	
		Percent of children 0-12 mos with full coverage: (1985)	UNICEF(1986) Annual Report
	75	Polio	
	81	Measles	
	75	DPT	
	85	BCG	
		Vaccination coverage of children 0-12 mos(1984): (percent)	Min. de Salud (1985) Primera Evaluacion Multidiciplinaria del Prog. de Immuniz. en Costa Rica
	88.5	Polio 1	
	71.1	Polio 3	
	76.2	Measles	
	88.6	DPT 1	
	80.1	DPT 2	
	71.3	DPT 3	
		BCG	
1.b	46.4	Percent of women who received at least one dose of tetanus toxoid during their last pregnancy(1985-6)	Asoc. Demografica Costarricense (1986) Encuesta de Fecundidad y Salud

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
1.c	0	Measles-assoc. mortality (1984,1985) (all ages)	Min. de Salud (1985) Primera Evaluacion Multi diciplinaria del Prog. de Immuniz. en Costa Rica
1.d	0.15	Tetanus-assoc. mortality (1985) (all ages) (per 100, 000 pop.)	same as above
	0	Tetanus-assoc. mortality (1984) (children 0-59 mos.)	same as above
		Note:age-specific mort. for 1985 not avail. No neonatal tetanus reported Costa Rica in 1983 or 1984	
Tier III Effectiveness			
1.a	not avail.		Min. de Salud (1986)
1.b	not avail.		Min. de Salud (1986)
1.c.1 and 2	0	Polio-assoc. morbidity and mortality (1985) (all ages)	Min. de Salud (1985) Primera Evaluacion Multi diciplinaria del Prog. de Immuniz. en Costa Rica
1.d.1 and 2	0	Measles-assoc. morbidity and mortality (1985) (all ages)	same as above
		Note:the 1 case of measles was an imported case (0.04/ 100,000 pop.-morbid. rate)	
1.e.1	0.23	Tetanus-assoc. morbidity (1985) (per 100,000 pop.)	Min. de Salud (1985) Anuario Estadistico

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
1.e.2	0.15	Tetanus-assoc. mortality (1985) (per 100,000 pop.)	Min. de Salud (1985) Anuario Estadistico
1.f.1	5.73	Pertussis-assoc. morbidity (1985) (per 100,000 pop.)	Min. de Salud (1985) Anuario Estadistico
1.f.2	0.08	Pertussis-assoc. mortality (1985) (per 100,000 pop.)	Min. de Salud (1985) Anuario Estadistico
1.g.1 and 2	0.0	Diphtheria-assoc. morbidity and mortality (1985) (all ages)	same as above
		Note: no cases of diphtheria in Costa Rica since 1975	Min. de Salud (1985) Primera Evaluacion Multidiciplinaria del Programa de Immunizaciones en Costa Rica
1.h	0.15	Tetanus-assoc. mortality (1985) (all ages) (per 100,000 pop.)	Min. de Salud (1985) Anuario Estadistico
	0.0	Tetanus-assoc. mortality (1984) (children 0-59 mos.)	same as above
		Note: age-specific mort. for 1985 not avail. No neonatal tetanus reported Costa Rica in 1983 or 1984	Min. de Salud (1985) Primera Eval. Multidisciplinaria del Prog. de Immunizaciones en Costa Rica
1.i		Percent of children under 72 mos. with weight/age deficiencies of: (1985) (from nutrition centers)	Min. de Salud (1985) Anuario Estadistico
	23.2	Grade I	
	3.5	Grade II	
	0.3	Grade III	

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
		Percent of children under 72 mos with weight/age deficiencies (Gomez):(1982)	Min. de Salud(1985) Encuesta Nacional de Nutricion,1982
	30.6	Grade I	
	3.3	Grade II	
	0.3	Grade III	
		Percent of children under 72 mos with weight for age deficiencies (Z score):(1982)	same as above
	24.6	-1 to -2 standard dev.	
	6.3	under -2 standard dev.	
1.j	0.3	Percent of children under 72 mos with Grade III weight/age (Gomez)(1982)	same as above
	6.3	Percent of children under 72 mos with under -2 standard dev. (Z score, NCHS ref. measures) (1982)	same as above
Nutrition Tier I Output 1.a and b	not avail.		Min. de Salud(1986)Div. de Nutricion

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
Tier II Effectiveness			
1.a	not avail.		Min. de Salud (1986) Div. de Nutricion
1.b	4.1	Duration of breastfeeding of last-born child (1985-6) (mos)	Asoc. Demografica Costarricense (1986) Encuesta de Fecundidad y Salud
	3.6	Duration of breastfeeding of last-born child (1981) (mos)	same as above
	7.2	Av. duration of breastfeeding of last two children (1981) (mos)	Asoc. Demografica Costarricense (1981) Fecundidad y Anticoncepcion en Costa Rica
	16.9	Percent of women who breast-feed their children for more than 6 mos. (1982)	Min. de Salud, Caja Costarricense de Seguro Social (1985) Diagnostico de la Situacion Perinatal, Costa Rica, 1982
	6.1	Duration of breastfeeding of last-born child (1981) (mos)	Min. de Salud Caja Costarricense de Seguro Social (1984) Diagnostico de la Situacion Perinatal, Costa Rica, 1982
	5.3	Duration of breastfeeding of next to last born child (mos) (1981)	same as above
1.c	15.8	Percent of children 0-59 mos who were monitored for growth and development (1984)	Min. de Salud (1986) "Cobertura de la Consulta de Crecimiento y Desarollo"
1.d	not avail.		Min. de Salud (1986) Div. Materno-Infantil

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
1.e	0.3	Percent of children under 72 mos with Grade III weight/age (Gomez) (1982)	Min.de Salud(1985) Encuesta Nacional de Nutricion, 1982
	6.3	Percent of children under 72 mos with under -2 standard dev. (Z score, NCHS ref. measures) (1982)	same as above
1.f	not avail.		Min. de Salud(1986) Div. de Materno-Infantil
Tier III Impact I.a		Percent of children under 72 mos. with weight/age deficiencies of:(1985) (from nutrition centers)	Min. de Salud(1985) Anuario Estadistico
	23.2	Grade I	
	3.5	Grade II	
	0.3	Grade III	
		Percent of children under 72 mos with weight/age deficiencies (Gomez):(1982)	Min. de Salud(1985) Encuesta Nacional de Nutricion,1982
	30.6	Grade I	
	3.3	Grade II	
	0.3	Grade III	
		Percent of children under 72 mos with weight for age deficiencies (Z score):(1982)	same as above
	24.6	-1 to -2 standard dev.	
	6.3	under -2 standard dev.	

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
1.b	0.3	Percent of children under 72 mos with Grade III weight/age (Gomez) (1982)	same as above
	6.3	Percent of children under 72 mos with under -2 standard dev. (Z score, NCHS ref. measures) (1982)	same as above
ROCAP Program indicators			
1.	16.2	Infant mortality rate (1985) (per 1,000 live births)	Asoc. Demografica Costarricense (1986) Encuesta de Fecundidad y Salud
	18.4	Infant mortality rate (1984) (per 1,000 live births)	Min. de Salud, Caja Costarricense de Seguridad Social (1985) Diagnostico de la Situacion Perinatal, Costa Rica
2.	0.3	Percent of children under 72 mos with Grade III weight/age (Gomez) (1982)	Min. de Salud (1985) Encuesta Nacional de Nutricion, 1982
	6.3	Percent of children under 72 mos with under -2 standard dev. (Z score, NCHS ref. measures) (1982)	same as above
3.		Avail. from prog. evaluations?	

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
4.		Number of health workers trained in clinical management of diarrhea (up to 1986)	Pan American Health Org. (1986) "Informacion Sobre Actividades de los Programas de Control de Enfermedades Diarreicas"
	1,282	Physicians	
	1,532	Other health personnel	
	265	Vol./Comm. health workers	
	246	Other	
		No. of health workers trained in control of diarrheal disease (1981):	Min. de Salud (1984) Evaluacion de las Actividades de Control de Enfermedades Diarreicas en Costa Rica
	82	Physicians	
	410	Other health personnel	
	711	Vol./community health workers	
	265	Volunteer community leaders trained for community work in ORT (1982)	Min. de Salud (1986) Informe, Div. de Materno-Infantil
	94.2	Percent of health personnel who had been trained in diarrheal disease control and ORS (1983)	Min. de Salud (1984) Evaluacion de las Actividades de Control de Enfermedades Diarreicas en Costa Rica
		Note: according to this evaluation, most ORS training of personnel took place from 1979 to 1982	
	10	No. of health workers trained in growth monitoring (1985)	INCAP (1985) Datos de Capacitacion, 1985 Programa de TRO
	not avail.	Data on health workers trained in nutrition not avail.	Min. de Salud (1986) Div. de Nutricion

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
5.		Avail. from prog. evaluations?	
6.	13,764	Mothers given nutrition counseling (1985) (first quarter data only-all health regions)	Min. de Salud (1986) Div. de Nutricion
		Data on availability of knowledge of diarrheal feeding, management and high risk in prog. evaluations?	
7.	0	No. of ORS packets imported	Min. de Salud (1986) "Sales de Rehidratacion Oral" Div. de Materno-Infantil
		Local production: (1985)	
	500,000	Min. of Health (liter) (annual production)	
	870,000	Social Security system (8 oz.) (annual purchase)	
	some	private sector labs: OMNI, RAVEN and STEIN	
		Annual distribution (1983):	Min. de Salud (1984) Evaluacion de las Actividades de Control de Enfermedades Diarreicas en Costa Rica
	159,994	Min. of Health (liter and 240 cc packets)	
	407,313	Social Security system (liter and 240 cc.)	
	6,000,000	RAVEN laboratory (240cc)	
		Note: in 1983, public health facilities were utilizing ORS produced locally and imported by UNICEF. In 1984-5, the Min. of Health began production of ORS packets in liter size.	

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
	27	Percent of personnel reporting problems obtaining sufficient supplies of ORS(1984).	same as above
		Note:provision of ORS was considered to be insufficient in 2 of the 5 health regions(1983)	same as above
8.		Avail. from prog. evaluations?	
9.	78	Percent children under 5 with diarrhea in the past month treated with ORS(1984)	Min de Salud(1986) "Sales de Rehidratación Oral" from Evaluaction de las Actividades de Control de Enf. Diareicas en Costa Rica
	21	Percent use-rate of ORT (1984)	Bureau for Latin America and the Caribbean(1986) Health
	70	Percent of mothers who suspend food when their child has diarrhea(1984)	Min. de Salud(1984) Evaluacion de las Actividades de Control de Enfermedades Diarreicas en Costa Rica

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PANAMA

ANNEX

F

CHILD SURVIVAL BASELINE, 1985
PANAMA
TIER I

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
Demographics			
1-1.1	2.1 million	population (1984) projection	MS (1986) Plan de Supervivencia Infantil and MS, Caja de Seg. Social, Min. de Planif. (1985) Proyecto Red Nacional de Servicios de Salud
1-1.2	57,537	No. of children 0-12 mos. (1985)	MS (1986) Coordinación Nacional del PAI
	56,177	No. of children 0-12 mos. (1985)	MS, Caja de Seg. Social, Min. de Plan. (1985) Proyecto Red Nacional de Servicios de Salud
	57,341	No. of children 0-12 mos. (1985) (projection)	Direc. de Estadistica y Censo (1985) Estadística Panameña
	277,250	No of children 0-59 mos. (1985) (projection)	same as above
	224,708	No. of children 13-59 mos. (1985)	MS, Caja de Seg. Soc. Min. de Planif. (1985) Proyecto Red Nac. de Servicios de Salud.
		No of children: (1983)	Direc. de Estadística y Censo (1986) Estadística Panameña, Situación Demográfica
	55,944	12-23 mos.	
	55,483	24-35 mos.	
	55,112	36-47 mos.	
	54,808	48-59 mos.	

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
1-1.3	526,943	Total women 15-49 yrs (1985)	same as above
	120,015	women 15-19 yrs	
	104,188	women 20-24 yrs	
	87,163	women 25-29 yrs	
	70,685	women 30-34 yrs	
	58,504	women 35-39 yrs	
	47,716	women 40-44 yrs	
	38,672	women 45-49 yrs	
1-1.4	57,535	Live births (1985, prelim.)	Direc. Nac. de Estad. y Censo (1986)
1-1.5	26.9	Infant mortality rate (1985) (per 1,000 live births)	MS (1986) Estadísticas
	21.6	Infant mortality rate (1985) (prelim.) (per 1,000 l.b.)	MS (1986) Estadísticas
	20.4	Infant mortality rate (1983) (per 1,000 live births)	Pan American Health Org. (1986) Las Condiciones de Salud en las Americas, 1981-84
	0.5	Child death rate (1-5 yrs) (1985) (per 100,000 pop.)	MS (1986) Epidemiología El Programa de PAI
	1.0	Child death rate (1-5 yrs) (1985)	Bureau for Latin America and the Caribbean (1986) Health
		Note: under-reporting of deaths estimated to be 3.6% nationwide (in Indigenous areas, under-reporting of deaths was as high as 84.4%)	

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
1-1.6		Health workers: (1985)	MS, Caja de Seguridad Social, Min. de Planificación y Política Econ. (1985) Proyecto Red Nacional de Servicios de Salud
	6,917	MS	
	10,111	Caja de Seg. Soc.	
	543	IDAAN	
	229	DIMA	
	7,955	Health workers: (1984) (MS)	PAHO (1986) Infor. Sobre Actividades de los Prog. de Control de Enfermedades Diarréicas
	2,364	Physicians	
	5,029	Nurses	
	562	Other health personnel	
1-1.7	72	Hospitals (1983)	MS, Caja de SS, Min. de Planif. (1985) Proyecto Red Nac. de Servicios de Salud
	291	Health Centers (1983)	
	548	All health facilities (1985)	INCAP rep., MS (1986)
ORT			
2-1.1	150,000	No. of ORS packets imported by the MS (from UNICEF) (1985) (liter) (no local production)	PAHO (1986) Infor. Sobre Actividades de los Prog. de Control de Enfermed. Diarréicas
2-1.2	.07	Cost per packet to the proj. (1985)	INCAP rep., MS (1986)
2-1.3	0.00	Cost to the consumer	INCAP rep., MS (1986)
2-1.4		(lack of a continuing educ. considered highest priority in personnel training)	MS (1985) Eval. de los Programas de Salud Materno-Infantil

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
2-1.5	548	All health facilities (1985)	INCAP rep., MS (1986)
2-1.6	548	All health facilities (1985)	INCAP rep.,MS (1986)
2-1.7		% efficiency level - supplies:	MS (1985) Evaluación de los Prog. de Salud Materno-Infantil
	69.0	health centers	
	46.0	health posts	
2-1.8		% efficiency level - staffing	MS (1986) Evaluación de los Prog. de Salud Materno-Infantil
	72.3	health centers	
	73.0	health posts	
		% efficiency level - supplies:	MS (1985) Evaluación de los Prog. de Salud Materno-Infantil
	69.0	health centers	
	46.0	health posts	
Immunization			
3-1.1		No. of vaccine doses imported: (1985)	MS(1986) Epidemiologia
	350,000	DPT	
	300,000	measles	
	350,000	polio	
	400,000	BCG	
	751,800	other (T.T.,D.T.,yellow fever, german measles, cholera, etc.)	
3-1.2	none	user fees charged (1985)	INCAP rep., MS (1986)

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
3-1.3		Health personnel to be trained (1985):	same as above
	120	Physicians	
	120	Other health personnel	
	300	Volunteers, community workers	
	500	Other	
		Health personnel trained (1985):	
	40	Physicians	
	40	Other health personnel	
	300	Volunteers, community workers	
	500	Other	
		(lack of a continuing educ. considered highest priority in personnel training)	MS (1985) Eval. de los Programas de Salud Materno-Infantil
3-1.4	548	MS facilities (1985)	INCAP rep., MS (1986)
	120	private pediatricians	
3-1.5	548	MS facilities (1985)	INCAP rep., MS (1986)
	120	private pediatricians	
3-1.6	not avail.	note: data on this would require a detailed systems survey	
		% efficiency level - supplies:	MS (1985) Evaluación de los Prog. de Salud Materno-Infantil
	69.0	health centers	
	46.0	health posts	
3-1.7	48.0	percent of health posts without refrigeration	MS (1984) Depto. de Epidemiología
	7.8	percent of health posts with refrigeration not in operating condition	
		% efficiency level - equipmnt:	MS(1985) Evaluacion de los Prog. de Salud Materno-Infantil
	84.2	health centers	
	55.0	health posts	

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
Nutrition			
4-1.1		(lack of a continuing educ. considered highest priority in personnel training)	MS (1985) Eval. de los Programas de Salud Materno-Infantil
4-1.2		(lack of a continuing educ. considered highest priority in personnel training)	MS(1985)Eval. de los Programas de Salud Materno-Infantil
	120	No. of health workers trained in growth monitoring(1985)	INCAP(1986)Datos de Capacitacion,1985 Programa de TRO
	84.2 55.0	% efficiency level - equipmnt: health centers health posts	MS(1985)Evaluacion de los Prog. de Salud Materno-Infantil
4-1.4		(lack of community educ. considered high priority by MS)	MS (1985)Eval. de los Programas de Salud Materno-Infantil
4-1.5	156,251	number of children 0-59mos. whose growth was monitored (1983):	MS (1986)Estadisticas
	78.5 51.8	percent coverage 0-11mos. percent coverage 12-59mos.	

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
High Risk			
5-1.1	not applic.		
5-1.2		(lack of continuing educ. considered highest priority in personnel training)	MS(1985) Eval. de los Programas de Salud Materno-Infantil
	45	No. of health workers trained in high risk births (1985)	INCAP(1986) Datos de Capacitacion,1985 Programa de TRO
5-1.3	not applic.		
5-1.4	not applic.		
5-1.5	not applic.		

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CHILD SURVIVAL BASELINE DATA 1985

PANAMA

TIER I, II AND III and ROCAP Project Indicators

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
Tier I			
ORT			
Output			
1.a	not avail.		MS(1986)
Impact			
2.a	not avail.		MS(1986)
Tier II			
Effectiveness			
1.a	not avail.		MS(1986)
1.b	not avail.		MS(1986)
1.c	not avail.		MS(1986)
1.d	4.3	percent of children under 6 with diarrhea in the past wk given salts (1984-85)	MS(1986) Encuesta Sobre Salud Materno-Infantil y Planificación Familiar
	0.7	percent of children under 6 with diarrhea in the past wk who were given ORT (home mix) (1984-85)	same as above
	7.6	percent of children under 6 with diarrhea in the past wk who were given traditional teas, herbs (1984-85)	same as above

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
Impact			
2.a	5.0	Diarrhea-assoc. mortality rate, children under 5 (per 10,000 children) (1985, prelim)	PAHO(1986) Informacion Sobre Actividades de los Programas de Control de Enfermedades Diarréicas
	1.6	Diarrhea associated mortality in children 0-59mos per 10,000) (1984)	MS(1986) Estadisticas
	2.0	diarrhea-assoc. mortality in children 13-59 mos (per 10,000) (1984)	MS(1986) Estadisticas
	2.5	Diarrhea-assoc. mortality rate, children 13-59 mos (per 10,000 children 13-59 mos) (1983)	Pan American Health Org. (1986) Las Condiciones de Salud en Las Americas
	3.6	Diarrhea associated mortality in children 0-59 mos. per 10,000) (1982)	PAHO(1986) Informacion Sobre Actividades de los Prog. de Control de Enferm. Diarreicas
2.b.	not avail.		MS(1986)
Tier III Effectiveness			
1.a	not avail.		MS(1986)
1.b	not avail.		MS(1986)

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
Impact			
2.a	15.6	Diarrhea-assoc. mortality rate, children 0-12 mos. (per 10,000 children 0-12 mos.) (1983)	Pan American Health Org. (1986) Las Condiciones de Salud en las Americas, 1981-84
	1.1	diarrhea-assoc. mortality rate in children 0-12 mos. (per 1,000) (1984)	MS (1984) Estadisticas
2.b	2,421	no. of children under 12 mos. hospitalized for intestinal infections (1982)	MS (1986) Estadisticas
	61,502	no. of children under 12 mos. sick from intestinal infections (1983) (61,502/57,537 x 100,000 = a rate of 106,891 per 100,000 children 0-12 mos)	MS (1986) Estadisticas
2.c	1,874	Diarrhea-assoc. morbidity rate, children under 59 mos. (per 10,000) (1983, prelim.)	PAHO (1986) Información Sobre Actividades de los Prog. de Control de Enfermedades Diarréicas.
	1,000	Diarrhea assoc. morbidity rate, children under 6 (1984-85) (per 10,000 child. under 6)	MS (1986) Encuesta sobre Salud Materno-Infantil y Planif. Familiar

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
	1,455.5	Acute diarrhea-assoc. morbidity rate, children under 59 mos (per 10,000) (1984)	MS(1986) Estadisticas
	1,473	No. of children 12-59 mos. hospitalized for intestinal infections (1982)	MS(1986)Estadisticas
	21,666	No. of children 12-59 mos. sick from intestinal infections (1983)	MS(1986)Estadisticas
2.d		Perc. of children 0-59 mos. with weight for age of: (1975)	MS(1979)Alimentacion y Nutricion en Panama la Situacion Acutal
	46	Grade I	
	18	Grade II	
	2	Grade III	
		Perc. of children 0-59 mos. with: (1980) (wt/age)	MS,INCAP(1982)Alimentacion y Nutricion en Panama, la Situacion Acutal
	37.7	Grade I	
	11.6	Grade II and Grade III	
2.e	15.8	Perc. of children 0-59 mos. with under 2 stand. dev. weight for age(1980)	same as above

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
Immunization			
Tier I			
Input			
1.a		No. of vaccine doses imported: (1985)	MS(1986) Epidemiologia
	350,000	DPT	
	300,000	measles	
	350,000	polio	
	400,000	BCG	
	751,800	other (T.T., D.T., yellow fever, german measles, cholera, etc.)	
Impact			
2.a	10	No. of cases of neo-natal tetanus (1985)	MS(1986) Epidemiologia
2.b	1,380	No. of cases of measles in children under 5 yrs. (1985 prelim.)	MS(1986) Epidemiologia
	358	No. of cases of measles (1984)	MS(1986) Epidemiologia
	264	No. of cases of measles (1984) (children under 5)	MS(1986) Epidemiologia
2.c	0	No. of cases of polio (1973-85)	MS(1986) Epidemiologia

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
Tier II Effectiveness 1.a			
		Vaccination coverage of children under 12 mos: (%) (1985) (public and private)	MS(1986) Coordinacion Nacional del PAI
	71.3	Polio	
	83.4	Measles	
	73.3	DPT	
	93.8	BCG	
		No. of vaccine doses applied: (1986) (public and private) (children under 12 mos)	MS(1986) Coordination Nacional del PAI
	45,932	DPT(1 and 3)	
	22,648	Measles	
	47,126	Polio (1 and 3)	
	25,825	BCG	
		Percent of children 0-12 mos. having received: (1984-5)	MS(1986) Encuesta Sobre Salud Materno-Infantil
	26.6	Polio 1	
	26.4	Polio 3	
	21.0	Measles	
	23.6	DPT 1	
	17.4	DPT 2	
	26.9	DPT 3	
	not avail.	BCG	
		Percent of children 0-12 mo. with complete doses of: (1984-5)	MS(1986) Encuesta Sobre Salud Materno-Infantil y Planif. Familiar
	28.0	Polio	
	23.8	Measles	
	28.6	DPT	
		Percent of children under 5 with complete doses of: (1984-5)	MS(1986) Encuesta Sobre Salud Materno-Infantil y Planif. Familiar
	67.2	Polio	
	67.3	Measles	
	67.2	DPT	

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
1.b	5,287	No. of doses of tetanus toxoid given to pregnant women (1985) (5,287/526,943 x 100 =1.0)	MS (1986) Coordinacion Nacional del PAI
1.c	0.1	Measles assoc. mortality rate (1984) (per 100,000 pop. -all ages)	MS (1986) Epidemiologia
		Measles assoc.: (1985, prelim.) (per 10,000 children under 5)	MS (1986) Epidemiology
	49.8	morbidity rate	
	0.3	mortality rate	
1.d		Neonatal Tetanus assoc: (1985, prelim.) (per 10,000 children under 5)	MS (1986) Epidemiologia
	0.3	mortality rate	
<u>Tier III</u>			
<u>Effectiveness</u>			
1.a	not avail.		MS (1986)
1.b	not avail.		MS (1986)
1.c		Polio associated: (1985)	MS (1986) Epidemiologia
	0.0	morbidity rate	
	0.0	mortality rate	
1.d		Measles assoc.: (1985, prelim.) (per 10,000 children under 5)	MS (1986) Epidemiology
	49.8	morbidity rate	
	0.3	mortality rate	
		Measles associated: (1984)	MS (1986) Epidemiología
	20.0	morbidity rate (per 100,000 pop.) (all ages)	
	0.1	mortality rate	

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
1.e		Tetanus assoc.: (1985, prelim.)	MS (1986) Epidemiologia
	0.05	morbidity rate (per 100, 000 pop.) (all ages)	
	0.05	mortality rate (per 100, 000 pop.) (all ages)	
		Tetanus associated: (1984)	MS (1986) Epidemiologia
	0.3	morbidity rate (per 100, 000 pop.) (all ages)	
	0.05	mortality rate (per 100, 000 pop.) (all ages)	
1.f		Pertussis assoc.: (1985, prelim.) (per 10,000 children under 5)	MS (1986) Epidemiologia
	1.6	morbidity rate	
	0.1	mortality rate	
		Pertussis assoc.: (1984)	MS (1986) Epidemiologia
	7.0	morbidity rate (per 100, 000 pop.) (all ages)	
	0.5	mortality rate (per 100, 000 pop.) (all ages)	
1.g		Diphtheria assoc.: (1985)	MS (1986) Epidemiologia
	0.0	morbidity rate	
	0.0	mortality rate	
1.h		Neonatal Tetanus assoc: (1985, prelim.) (per 10, 000 children under 5)	MS (1986) Epidemiologia
	0.4	morbidity rate	
	0.3	mortality rate	
1.i		Perc. of children 0-59 mos. with weight for age of: (1975)	MS (1979) Alimentacion y Nutricion en Panama
	46	Grade I	
	18	Grade II	
	2	Grade III	

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
1.j	15.8	Perc. of children 0-59 mos. with under 2 stand. dev. weight for age (1980)	same as above
Nutrition			
Tier I			
Output			
1.a.1 and 2	not avail.		MS (1986)
Tier II			
Effectiveness			
1.a	not avail.		MS (1986)
1.b	49.2	Perc. of women who breastfeed their children for over 6 mos. (1985)	INCAP (1985) Comportamientos Alimentarios durante el Embarazo, Puerperio y Lactancia
	11.1	av. duration of lactation (mos.) (1984-85)	MS (1986) Encuesta sobre Salud Materno-Infantil y Planificacion Familiar
	9.5	av. duration of lactation (mos) (1979)	same as above
	83.2	percent of women who breast-fed their last born child (1984-85)	same as above
	4	average month of age at which first semi-solid food introd. (fruit puree)	MS (1986) Encuesta Sobre Salud Materno-Infantil y Planif. Familiar

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
1.c	156,251	number of children 0-59 mos. whose growth was monitored (1983):	MS (1986) Estadisticas
	78.5	percent coverage 0-11mos.	
	51.3	percent coverage 12-59mos.	
	93.8	percent of women in fertile age who took their last born child to be weighed (1984-85)	same as above
1.d	not avail.		MS (1986)
1.e	15.8	Perc. of children 0-59 mos. with under 2 stand. dev. weight for age (1980)	same as above
1.f	not avail.		MS (1986)
Tier III			
Impact			
1.a		Perc. of children 0-59 mos. with weight for age of: (1975)	MS (1979) Alimentacion y Nutricion en Panama
	37.7	Grade I	
	11.6	Grade II and Grade III	
		Perc. of children 0-59 mos. with weight for age of: (1975)	MS (1979) Alimentacion y Nutricion en Panama la Situacion Acutal
	46	Grade I	
	18	Grade II	
	2	Grade III	
1.b	15.8	Perc. of children 0-59 mos. with under 2 stand. dev. weight for age (1980)	same as above

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
ROCAP Program Indicators			
1.	26.9	Infant mortality rate(1985) (per 1,000 live births)	MS(1986)Estadisticas
	21.6	Infant mortality rate(1985) (prelim.)(per 1,000 live births)	MS(1986)Estadisticas
	20.4	Infant mortality rate(1983) (per 1,000 live births)	Pan American Health Org.(1986)Las Condiciones de Salud en las Americas, 1981-84
2.	15.8	Perc. of children 0-59 mos. with under 2 stand. dev. weight for age(1980)	MS(1979)Alimentacion y Nutricion en Panama
3.		see prog. evaluations	
4.	not avail.	No nutrition training info. avail.	MS(1986)Div. of Nutr.
		(lack of a continuing educ. considered highest priority in personnel training)	MS(1985)Eval. de los Programas de Salud Materno-Infantil
5.		see prog. evaluations	
6.		see prog. evaluations	
	not avail.	No data avail. on provider or community knowledge availability	MS(1986)

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
7.	150,000	No. of ORS packets imported by the MS (from UNICEF) (1985) (liter) (no local production)	PAHO(1986) Infor. Sobre Actividades de los Prog. de Control de Enfermed. Diarreicas
8.		see prog. evaluations	
9.	4.3	percent of children under 6 with diarrhea in the past wk given salts (1984-85)	MS(1986) Encuesta Sobre Salud Materno-Infantil y Planif. Familiar
	0.7	percent of children under 6 with diarrhea in the past wk who were given ORT (home mix) (1984-85)	same as above
	7.6	percent of children under 6 with diarrhea in the past wk who were given traditional teas, herbs (1984-85)	same as above

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BELIZE

ANNEX
G

CHILD SURVIVAL BASELINE, 1985
BELIZE

TIER I

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
Demographic			
1-1.1	166,193	Total estimated population (1985)	Ministry of Health(1987) Population and Health Statistics
	166,213	Total estimated population (1985)	Central Statistical Office Min. of Econ. Dev.(1986) Abstract of Statistics,1986
1-1.2	21,808	Total population 12-59 mos.(1985)	Ministry of Health(1987) Population and Health Statistics
	27,751	Total population 0-59 mos.(1985)	Central Statistical Office Min. of Econ. Dev.(1986) Abstract of Statistics,1986
1-1.3	32,574	Total women 15-49 yrs. (1985)	Ministry of Health(1987) Population and Health Statistics

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
	34,831	Total women 15-49 yrs.(1985)	Central Statistical Office, Ministry of Economic Dev.(1985) Abstract of Statistics.1986
	9,472	women 15-19 yrs.	
	7,580	women 20-24	
	5,781	women 25-29	
	4,203	women 30-34	
	3,108	women 35-39	
	2,438	women 40-44	
	2,249	women 45-49	
1-1.4	6,094	Live births (1985)	Ministry of Health(1987) Population and Health Statistics
1-1.5	131	No. of infant deaths(1985)	Ministry of Health(1987) Population and Health Statistics
	31	No. of deaths in 12-59 mos.(1985)	
	21.4	Infant mortality rate (1985) (per 1,000 live births)	Ministry of Health(1987) Population and Health Statistics
	1.4	Child mortality rate (1985) (per 1,000 children)	

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
1-1.6.		Health personnel in Belize(1984):	Ministry of Health, PAHO (1985) Priority Health Needs Belize
	45	government physicians	
	33	private physicians	
	317	nurses(all levels)	
	243	other health personnel	
	some	vol., community health workers (traditional birth attendants, community health workers, Red Cross vols., and members of local health committees)	
	109	No. of traditional birth attendants (1984)(trained and untrained)	Ministry of Health(1985) National Plan of Action for Maternal and Child Health Services, 1985-1987
	19	No. of community health workers (1984)	
1-1.7		No. of government health facil:	Ministry of Health(1987) Population and Health Statistics
	7	hospitals (1985)	
	28	health centers(8 urban and 20 rural)	
Oral Rehydration			
2-1.1	47,900	No. of ORS packets(liter) distributed country-wide(1984)	Ministry of Health(1986) Country-wide Distribution of ORS
	25,000	No. of ORS packets requested for 1985 (liter)(all from UNICEF)	Ministry of Health, Central Stores (1987) personal communication
2-1.2	0.12	Cost per packet (1985)(liter)	same as above

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
2-1.3	0	Price per packet to the consumer (public sector)(1985)	same as above
2-1.4		Note: most ORT training in Belize took place in 1984. In 1985 the only training in ORT took place in professional school curricula.	Matron Courtney, personal communication(1987)
	85	Percent of traditional birth attendants trained by 1986(all (subjects)(53 out of a total of 62)	Ministry of Health(1986) The TBA in Belize
		Note: most non-physician health personnel found to have been trained in ORS/ORT. Most physicians found to be uninformed about ORS/ORT(1983)(hosp. level) (national sample)	Ministry of Health, PAHO (1983) Review of the Diarrheal Disease Control Program in Belize
		Note: while all community health workers were found to have received training in ORS/ORT, many nurses were found not to have received ORS/ORT training(1983)(health center level)(national sample)	same as above
2-1.5	7 28	No. of government health facil: hospitals (1985) health centers(8 urban,20 rural)	Ministry of Health(1987) Population and Health Statistics

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
2-1.6	7 28	No. of government health facil: hospitals (1985) health centers(8 urban,20 rural)	Ministry of Health(1987) Population and Health Statistics
2-1.7		Note: 100% coverage with salts estimated for 1985, though there was a one month lag in distribution during the year.	Matron Courtney, personal communication(1987)
		Note: all hospitals reported ORS supplies arriving promptly after ordering and in good condition (1983)(national sample)	Ministry of Health, PAHO (1983) Review of the Diarrheal Disease Control Program in Belize
		Note: most health centers reported receiving ORS packets in good condition within 1-7 days of request. Several reported occasionally receiving damaged packets (1983)(national sample)	Ministry of Health, PAHO (1983) Review of the Diarrheal Disease Control Program in Belize
2-1.8		Note: 100% coverage with salts and trained personnel estimated for 1985.	Matron Courtney, personal communication(1987)
		Note: all hospitals reported ORS supplies arriving promptly after ordering and in good condition (1983)(national sample)	Ministry of Health, PAHO (1983) Review of the Diarrheal Disease Control Program in Belize

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
		Note: most health centers reported receiving ORS packets in good condition within 1-7 days of request. Several reported occasionally receiving damaged packets (1983)(national sample)	Ministry of Health, PAHO (1983) Review of the Diarrheal Disease Control Program in Belize
		Note: most ORT training in Belize took place in 1984. In 1985 the only training in ORT took place in professional school curricula.	Matron Courtney, personal communication(1987)
	85	Percent of traditional birth attendants trained by 1986(all (subjects)(53 out of a total of 62)	Ministry of Health(1986) The TBA in Belize
		Note: most non-physician health personnel found to have been trained in ORS/ORT. Most physicians found to be uninformed about ORS/ORT(1983)(hosp. level) (national sample)	Ministry of Health, PAHO (1983) Review of the Diarrheal Disease Control Program in Belize
		Note: while all community health workers were found to have received training in ORS/ORT, many nurses were found not to have received ORS/ORT training(1983)(health center level)(national sample)	same as above

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
Immunization			
3-1.1		Vaccine doses procured (1985):	PAHO (1984) EPI Revolving Fund, Purchase Authorization
	7,700	measles	
	30,500	polio	
	31,000	DPT	
	7,000	BCG	
	20,000	tetanus toxoid	
3-1.2	0	User fees charged(1985)	Public Health Nursing Service (1987) personal communication
3-1.3		Note: EPI training in 1985 included all rural and public health nurses, some vol. health workers, some students, and some health professionals in the private sector (no nos. available)	same as above
		Note: no EPI training took place in 1985	Ministry of Health, Dr. Dr. Reneau(1987) and Project Hope, personal communications
3-1.4		No. of government health facil:	Ministry of Health(1987) Population and Health Statistics
	7	hospitals (1985)	
	28	health centers(8 urban,20 rural)	
3-1.5		No. of government health facil:	Ministry of Health(1987) Population and Health Statistics
	7	hospitals (1985)	
	28	health centers(8 urban,20 rural)	

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
3-1.6		Note: 100% of all facilities are estimated to have had all vaccines in inventory (1985)	Public Health Nursing Service(1987) personal communication
3-1.7	93	Percent of all health center refrigerators in working condition (25 out of 27)(1985)	Matron Roberts Health Center (1985) Public Health Nursing Service Records
	56	Percent of all health center refrigerators in working condition (15 out of 27)(1984)	same as above(1984)
Nutrition			
4-1.1	85	Percent of traditional birth attendants trained up to 1986 (53 out of 62)(all subjects)	Ministry of Health (1986) The TBA in Belize
	20 unk no.	Breastfeeding training(1985): student nurses, Belize City all nurses at all health centers	Breast is Best League(1987) personal communication
4-1.2		Note: training in growth monit. took place in 1984, not 1985	Public Health Nursing Service (1987) personal communication
		Note: no training in growth monitoring since 1982	Ministry of Health, Department of Nutrition (1987) personal commun.

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
	85	Percent of traditional birth attendants trained up to 1986 (53 out of 62)(all subjects)	Ministry of Health (1986) The TBA in Belize
4-1.3		Note: an estimated 100% of all health facilities had at least two operating scales (infant and adult)(1985).All health facilities have Salter, balance beam and bath scales. Some of the balance beam and bath scales have problems. They are looking into this now (1987)	Public Health Nursing Service (1987) personal communication
4-1.4		Note: community ed. takes place at all prenatal and MCH clinics but no numbers are available except perhaps on the local level	same as above
4-1.5		Note: data on children enrolled in growth monitoring is not avail. on the central level	same as above
High risk births			
5-1.1	Not applic.		
5-1.2	85	Percent of traditional birth attendants trained up to 1986 (53 out of 62)(all subjects)	Ministry of Health (1986) The TBA in Belize

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
		Note: the actual number of trad. birth attendants in Belize is unknown	Ministry of Health (n.d.) Primer Seminario de Salud Salud Materno Infantil, Nutricion y Planificacion Familiar de Centro America Panama y Belize
		Note: as 40% of births take place outside of the Western medical system, the real frequency of low birth weights is unknown	Ministry of Health, PAHO (1985) Priority Health Needs/ Belize
5-1.3	Not applic.		
5-1.4	Not applic.		
5-1.5	Not applic.		
Oral Rehydration Tier I Output 1.a		Note: this data is only available at the local level. It is not collected on the national level.	Matron Courtney, personal communication(1987)
	21	Percent of health centers conducting community education in diarrheal disease control(1983) (national sample)	Ministry of Health, PAHO (1983) Review of the Diarrheal Disease Control Program in Belize

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
		Note: Belize is the only district with health ed. materials. No materials are produced locally (1983)(national sample)	same as above
Impact 2.a		No. of cases of severe dehydration seen at the Oral Rehyd. Unit:	Ministry of Health(1984) Oral Rehydration Unit. Summary,1984 and 1985
	2	1985(.2% of all cases)	
	3	1984	
		No. of cases of dehydration (all grades)(1985):	Ministry of Health (1985) Communicable Disease File
	10	children 0-12 mos.	
	8	children 13-60 mos.	
Tier II Effectiveness 1.a			
		Note: ORS prescriptions found to be generally accompanied by prescriptions for ampicillin, kaopectate or lomotil (hospital level)(1983)(national sample)	Ministry of Health, PAHO (1983) Review of the Diarrheal Disease Control Program in Belize
	73.7	Percent of health centers reporting use of ORT on a routine basis (1983) (national sample)	Ministry of Health, PAHO (1983)Review of the Diarrheal Disease Control Program in Belize

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
1.b	57.5	Percent of households with knowledge of ORS (Belize City) (1983)	Oral Rehydration Unit (1983) Update Report CDD Activities
		Results of community survey(1983) (national level, non-random):	Ministry of Health, PAHO (1983) Review of the Diarrhea Disease Control Program in Belize
	63.2	Percent of mothers recognizing the ORS packet	
	49.1	Percent of mothers who had received instructions on ORS	
	24.6	Percent of mothers who correctly described the prep. of ORS	
	40.0	Percent of ORS mixing trials performed correctly by mothers (2 out of 5)	
	38.6	Percent of mothers reporting never having seen any printed material on ORS/ORT	
	52.6	Percent of mothers who had never heard a radio message on ORS/ORT	
1.c		Note: people are frequently suspicious of ORS because it doesn't stop the diarrhea. The grandmothers are the most opposed.	Nurse Jenkins, personal communication, ORT Unit(1987)
		Note: CHW's reported universal acceptance of ORT among mothers, although some mothers complain that ORT increases stools and won't use ORT again(1983)(national)	Ministry of Health, PAHO (1983) Review of the Diarrheal Disease Control Program in Belize

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
1.d	42.3	Percent of children under 5 with diarrhea in the past 2 weeks who were treated with ORT (1984) (national sample)	Ministry of Health, PAHO (1985) Priority Health Needs/ Belize
	55.2	Percent of children under 5 with diarrhea in the past 6 weeks who were treated with ORS(1983) (national sample)	Ministry of Health, PAHO (1983) Review of the Diarrheal Disease Control Program in Belize
Impact 2.a	4.6	Diarrhea-assoc. mortality rate in children 12-59 mos.(1985) (per 10,000 children)(10 deaths from infectious intestinal diseases/21,808 x 10,000)	Ministry of Health(1987) Population and Health Health Statistics
	11.9	Diarrhea-assoc. mortality rate in children 0-59 mos.(1985) (per 10,000 children)(33 deaths from gastroenteritis/27,751 x 10,000)	Central Statistical Office Min. of Econ. Dev.(1986) Abstract of Statistics,1986
	12	No. of infant deaths from infectious intestinal diseases(1985)	Same as above
		Diarrhea-assoc. mortality rate in children (1985)(per 10,000)	Central Registry Office (1986) Deaths for 1985
	16.8	0-11 mos.(10 deaths)	
	4.6	12-59 mos. (10 deaths)	
	7.9	9-59 mos. (22 deaths)	

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
2.b	Not available		
Tier III			
Effectiveness			
1.a	Not available		
1.b	Not available		
Impact			
2.a	2.0	Diarrhea-assoc. mortality rate in children 0-12 mos.(12 deaths) (1985)(per 1,000 children)	Ministry of Health(1987) Population and Health Statistics
	1.7	Diarrhea-assoc. mortality rate in children 0-12 mos.(1985) (per 1,000 children)(10 deaths)	Central Registry Office (1986)Deaths for 1985
2.b	16,692	Diarrhea-assoc. morbidity rate in children 0-12 mos.(1985) (992 cases/5943 x 100,000)	Ministry of Health(1986) Communicable Disease File
2.c	2,193	No. of cases of gastroenteritis in children 0-71 mos.(1985)	Ministry of Health(1987) Population and Health Statistics
	11,513	Diarrhea-assoc. morbidity rate in children 0-59 mos. (1985) (3,195 cases/27,751 x 100,000)	Central Statistical Office Min. of Econ. Dev.(1986) Abstract of Statistics.1986

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
	1,922 117	Morbidity rates (1985)(all ages) (per 100,000 pop.): gastro-enteritis dysentery	Ministry of Health(1987) Population and Health Statistics
	8,086	Diarrhea-assoc. morbidity rate in children 0-60 mos.(1985) (2,244 cases/27,751 x 100,000)	Ministry of Health (1986) Communicable Disease File
		Note: in 1985-86 there were two peaks of diarrhea: Dec-Jan, and June-July	Oral Rehydration Unit, Belize City Hospital (1987)
2.d	.32 .18	Percent of children with malnutrition(1985): 0-12 mos.(19 cases) 13-60 mos.(40 cases)	Ministry of Health(1986) Communicable Disease File
	6.8	Percent case fatality from malnutrition (1985)(children 0-60 mos.)	Ministry of Health(1986) Communicable Disease File and Central Registry Office (1986)Deaths for 1985
	8	Percent of children 0-12 mos. with Grade II (7%) and Grade III (1%) malnutrition(wt/age) (no date)(health facility reports)	Ministry of Health, PAHO Priority Health Needs/ Belize
	19	Percent of children 13-60 mos. with Grades II or III (wt/age) malnutrition(no date)(health facility reports)	same as above

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
		Percent of children 0-36 mos. with weight/age deficiencies (1976-79)(clinic records,country-wide):	Ministry of Health (n.d.) Primer Seminario de Salud Materno Infantil. Nutricion, y Planificacion Familiar de Centro America y Panama
	20.7	Grade I	
	5.5	Grade II	
	0.7	Grade III	
	22.0	Percent of children with any grade of deficiency wt/age(1981) (six districts, children attending selected clinics)	same as above
2.e	1.0	Percent of children 0-12 mos. with Grade III wt/age(no date) (health facility reports)	Ministry of Health, PAHO (1985)Priority Health Needs/ Belize
	0.7	Percent of children 0-36 mos. with Grade III wt/age (1976-79) (clinic records, country-wide)	Ministry of Health (n.d.) Primer Seminiario de Salud Materno Infantil, Nitricion, y Planificacion Familiar de Centro America y Panama
Immunization			
Tier I			
Input			
1.a		Vaccine doses procured (1985):	PAHO (1984) EPI Revolving Fund, Purchase Authorization
	7,700	measles	
	30,500	polio	
	31,000	DPT	
	7,000	BCG	
	20,000	tetanus toxoid	

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
Impact			
2.a	0	No. of cases of neo-natal tetanus(1985)	Ministry of Health (1986) Communicable Disease File
2.b	7	No. of cases of measles(1985)	Ministry of Health(1987) Population and Health Statistics
2.c	0	No. of cases of polio(1984-85)	Ministry of Health(1987) Population and Health Statistics
Tier II			
Effectiveness			
1.a		Percent vaccination coverage of children 0-12 mos.(1985):	PAHO(1986)Report of a National Immunization Campaign in Belize:March-Sept.,1986
	60	polio	
	49	measles	
	59	DPT	
	82	BCG	
		Doses applied to children 0-12 mos. (1985)(MOH facil. only):	Ministry of Health(1985) EPI Program Monthly Reports
	3,615	polio 1	
	3,615	polio 3	
	2,969	measles	
	3,550	DPT 3	
	4,882	BCG	
1.b	66	Percent of all pregnant women in Belize fully immunized against tetanus (1983)	Ministry of Health, PAHO (1985)Priority Health Needs/ Belize

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
	2,589	No. of doses plus booster, tetanus toxoid, given to preg. women(1985)	Ministry of Health (1985) EPI Program Monthly Reports
1.c	0	Measles-assoc. mortality rate in children 0-69 mos.(1985)	Central Registry Office (1986)Deaths for 1985
1.d	0	Neo-natal tetanus-assoc. mortality (1985)	Central Registry Office (1986)Deaths for 1985
Tier III			
Effectiveness			
1.a	not avail.		
1.b	not avail.		
1.c	0	No. of cases of polio(1984-85) (all ages)	Ministry of Health(1987) Population and Health Statistics
		Note:no cases of polio in Belize since 1980	Ministry of Health, PAHO (1985)Priority Health Needs/ Belize
1.d		Measles-assoc. (1985): (per 100,000 population)	Same as above
	4.2	morbidity rate(all ages)	
	0.0	mortality rate(all ages)	
		Measles-assoc. morbidity(1985): (per 100,000 children)	Ministry of Health (1986) Communicable Disease File
	0	0-12 mos.	
	9.2	13-60 mos.(2 cases)	

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
1.e		Tetanus-assoc.(1985): (per 100,000 population)	Ministry of Health(1987) Population and Health Statistics
	1.2	morbidity rate(all ages)	
	1.2	mortality rate(all ages)	
		Tetanus-assoc. (1985):	Ministry of Health (1986) Communicable Disease File
	0	morbidity (0-60 mos.)	
	0	mortality (0-60 mos.)	
1.f		Pertussis-assoc.(1985): (per 100,000 population)	Ministry of Health (1987) Population and Health Statistics
	1.0	morbidity rate(all ages)	
	0.0	mortality rate(all ages)	
		Pertussis-assoc. morbidity(1985): (per 100,000 children)	Ministry of Health (1986) Communicable Disease File
	33.7	0-12 mos.(2 cases)	
	50.4	13-60 mos.(11 cases)	
	0.0	Pertussis-assoc. mortality(1985) (all ages)	Ministry of Health (1986) Communicable Disease File
1.g	0	No. of cases of diphtheria(1984-5) (all ages)	Ministry of Health (1987) Population and Health Statistics
1.h	0	No. of cases of neonatal tetanus (1985)	Ministry of Health(1986) Communicable Disease File
1.i		Percent of children with malnutrition(1985):	Ministry of Health(1986) Communicable Disease File
	.32	0-12 mos.(19 cases)	
	.18	13-60 mos.(40 cases)	

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
	6.8	Percent case fatality from malnutrition (1985)(children 0-60 mos.)	Ministry of Health(1986) Communicable Disease File and Central Registry Office (1986)Deaths for 1985
	8	Percent of children 0-12 mos. with Grade II (7%) and Grade III (1%) malnutrition(wt/age) (no date)(health facility reports)	Ministry of Health, PAHO Priority Health Needs/ Belize
	19	Percent of children 13-60 mos. with Grades II or III (wt/age) malnutrition(no date)(health facility reports)	same as above
		Percent of children 0-36 mos. with weight/age deficiencies (1976-79)(clinic records,country-wide):	Ministry of Health (n.d.) Primer Seminario de Salud Materno Infantil, Nutricion. y Planificacion Familiar de Centro America y Panama
	20.7	Grade I	
	5.5	Grade II	
	0.7	Grade III	
	22.0	Percent of children with any grade of deficiency wt/age(1981). (six districts, children attending selected clinics)	same as above
1.j	1.0	Percent of children 0-12 mos. with Grade III wt/age(no date) (health facility reports)	Ministry of Health, PAHO (1985)Priority Health Needs/ Belize

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
	0.7	Percent of children 0-36 mos with Grade III.wt/age (1976- 9) (clinic records, country-wide)	Ministry of Health (n.d.) Primer Seminiario de Salud Materno Infantil, Nitricion, y Planificacion Familiar de Centro America y Panama
Nutrition			
Tier I			
Output			
1.a.1		Note: community ed. takes place at all prenatal and MCH clinics but no numbers are available	Public Health Nursing Service (1987) personal communication
1.a.2		Note: community ed. takes place at all prenatal and MCH clinics but no numbers are available	same as above
Tier II			
Effectiveness			
1.a	not avail.		
1.b	48	Perc. of children fully breast-fed at 4 mo. of age (1985)	Ministry of Health (1987) Population and Health Statistics
	7-20	Average duration of breast-feeding(mos.)(1985)(3 districts)	UNFPA,PAHO(1985)Preliminary Report:KAP Survey on Family Life and Fertility
1.c	not avail.		
1.d	not avail.		

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
1.e	1.0	Percent of children 0-12 mos. with Grade III wt/age(no date) (health facility reports)	Ministry of Health, PAHO (1985)Priority Health Needs/ Belize
	0.7	Percent of children 0-36 mos. with Grade III wt/age (1976-79) (clinic records, country-wide)	Ministry of Health (n.d.) Primer Seminiario de Salud Materno Infantil, Nitricion, y Planificacion Familiar de Centro America y Panama
1.f	not avail.		
Tier III			
Impact			
1.a		Percent of children with malnutrition(1985):	Ministry of Health(1986) Communicable Disease File
	.32	0-12 mos.(19 cases)	
	.18	13-60 mos.(40 cases)	
	6.8	Percent case fatality from malnutrition (1985)(children 0-60 mos.)	Ministry of Health(1986) Communicable Disease File and Central Registry Office (1986)Deaths for 1985
	8	Percent of children 0-12 mos. with Grade II (7%) and Grade III (1%) malnutrition(wt/age) (no date)(health facility reports)	Ministry of Health, PAHO Priority Health Needs/ Belize
	19	Percent of children 13-60 mos. with Grades II or III (wt/age) malnutrition(no date)(health facility reports)	same as above

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
		Percent of children 0-36 mos. with weight/age deficiencies (1976-79)(clinic records,country-wide):	Ministry of Health (n.d.) Primer Seminario de Salud Materno Infantil, Nutricion, y Planificacion Familiar de Centro America y Panama
	20.7	Grade I	
	5.5	Grade II	
	0.7	Grade III	
	22.0	Percent of children with any grade of deficiency wt/age(1981) (six districts, children attending selected clinics)	same as above
1.b	1.0	Percent of children 0-12 mos. with Grade III wt/age(no date) (health facility reports)	Ministry of Health, PAHO (1985)Priority Health Needs/ Belize
	0.7	Percent of children 0-36 mos. with Grade III wt/age (1976-79) (clinic records, country-wide)	Ministry of Health (n.d.) Primer Seminiario de Salud Materno Infantil, Nitricion, y Planificacion Familiar de Centro America y Panama
ROCAP Project			
1.	21.4	Infant mortality rate (1985) (per 1,000 live births)	Ministry of Health(1987) Population and Health Statistics
2.	1.0	Percent of children 0-12 mos. with Grade III wt/age(no date) (health facility reports)	Ministry of Health, PAHO (1985)Priority Health Needs/ Belize

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
	0.7	Percent of children 0-36 mos. with Grade III wt/age (1976-79) (clinic records, country-wide)	Ministry of Health (n.d.) Primer Seminiario de Salud Materno Infantil, Nitricion, y Planificacion Familiar de Centro America y Panama
3.	not avail.		
4.a		Note: most ORT training in Belize took place in 1984. In 1985 the only training in ORT took place in professional school curricula.	Matron Courtney, personal communication(1987)
	85	Percent of traditional birth attendants trained by 1986(all (subjects)(53 out of a total of 62)	Ministry of Health(1986) The TBA in Belize
		Note: most non-physician health personnel found to have been trained in ORS/ORT. Most physicians found to be uninformed about ORS/ORT(1983)(hosp. level) (national sample)	Ministry of Health, PAHO (1983) Review of the Diarrheal Disease Control Program in Belize
		Note: while all community health workers were found to have received training in ORS/ORT, many nurses were found not to have received ORS/ORT training(1983)(health center level)(national sample)	same as above

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
4.b		Note: training in growth monit. took place in 1984, not 1985	Public Health Nursing Service (1987) personal communication
		Note: no training in growth monitoring since 1982	Ministry of Health, Department of Nutrition (1987) personal commun.
4.c	85	Percent of traditional birth attendants trained up to 1986 (53 out of 62)(all subjects)	Ministry of Health (1986) The TBA in Belize
	20 unk no.	Breastfeeding training(1985): student nurses, Belize City all nurses at all health centers	Breast is Best League(1987) personal communication
5.	not avail.		
6.a/c		Note: community ed. data only avail.at the local level. Not collected on the national level.	Matron Courtney, personal communication(1987)
	21	Percent of health centers conducting community education in diarrheal disease control(1983) (national sample)	Ministry of Health, PAHO (1983) Review of the Diarrheal Disease Control Program in Belize
		Note: Belize is the only district with health ed. materials. No materials are produced locally (1983)(national sample)	same as above

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
6.b		Note: community ed. takes place at all prenatal and MCH clinics but no numbers are available on the national level	Public Health Nursing Service (1987) personal communication
7.	47,900	No. of ORS packets(liter) distributed country-wide(1984)	Ministry of Health(1986) Country-wide Distribution of ORS
	25,000	No. of ORS packets requested for 1985 (liter)(all from UNICEF)	Ministry of Health, Central Stores (1987) personal communication
8.	not avail.		
9.a		Note: people are frequently suspicious of ORS because it doesn't stop the diarrhea. The grandmothers are the most opposed.	Nurse Jenkins, personal communication, ORT Unit(1987)
		Note: CHW's reported universal acceptance of ORT among mothers, although some mothers complain that ORT increases stools and won't use ORT again(1983)(national)	Ministry of Health, PAHO (1983) Review of the Diarrheal Disease Control Program in Belize
9.b	42.3	Percent of children under 5 with diarrhea in the past 2 weeks who were treated with ORT (1984) (national sample)	Ministry of Health, PAHO (1985)Priority Health Needs/ Belize

INDICATOR NO.	DATA AVAILABLE	TYPE OF DATA/COMMENTS	SOURCE
	55.2	Percent of children under 5 with diarrhea in the past 6 weeks who were treated with ORS(1983) (national sample)	Ministry of Health, PAHO (1983)Review of the Diarrheal Disease Control Program in Belize
9.c		Note: it is common practice to reduce amount of food given to children when they have diarrhea and follow a special diet.	Ministry of Health, PAHO (1983)Review of the Diarrheal Disease Control Program in Belize
	45	Percent of mothers who suspend food(1983)(national-level)	
	48	Percent of mothers who suspend breastfeeding(1983)(national)	

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