EPI Newsletter

Expanded Program on Immunization in the Americas

Volume VII, Number 3 **IMMUNIZE AND PROTECT YOUR CHILD** *June 1985*

Goal for 1990: Polio Eradication in the Americas

PAHO announces new initiative

Without immunization, poliomyelitis can cripple up to 4 of every 1,000 children born. Where complete immunization is provided, virtually no child need suffer the devastating effects of this disease.

The fight to conquer polio was given new impetus recently when the Director of the Pan American Health Organization (PAHO), Dr. Carlyle Guerra de Macedo, announced on May 14 a proposal to **eradicate the indigenous transmission of wild poliovirus** from all countries of the Americas by 1990.

Speaking from PAHO's Washington, D.C. headquarters, Dr. Guerra de Macedo stated, "We are proposing that the Member Countries of PAHO be supported by all of us to achieve the eradication of polio from the Americas in a massive final five-year effort. The time has come for us to say that it is unacceptable for any child in the Americas to suffer from polio."

"The Americas was the first Region to eliminate smallpox," recalled the Director, "and we can be the first to eliminate polio." He outlined PAHO's plan to "promote a nationwide effort in every country, dedicated to a common strategy, committed to a common goal."

"The drive to eliminate polio," he said, "will be the vehicle that will carry the nations of the hemisphere toward the EPI goals of universal immunization against the childhood diseases by 1990."

Many of the most eminent leaders in the fight against poliomyelitis attended the announcement ceremony. Among those present were Drs. Jonas Salk and Albert Sabin, who led the research efforts to develop the killed and live poliovirus vaccines, respectively. Also attending were Nobel Prize winners Drs. Frederick Robbins and Thomas Weller.

The plan to eradicate the indigenous transmission of wild poliovirus will focus on acceleration of the Expanded Program on Immunization with special vaccination strategies adapted to the needs of each country, supported by effective disease surveillance and control, proper laboratory support for diagnosis, and training of field epidemiologists and program managers.

Representatives of the major organizations supporting the polio eradication effort join the Director of PAHO at the May 14 announcement. From left to right, Dr. D.A. Henderson (Dean, Johns Hopkins School of Hygiene and Public Health), Dr. Ciro de Cuadros (Regional EPI Adviser, PAHO), Dr. James Grant (Director, UNICEF), Dr. Carlyle Guerra de Macedo (Director, PAHO), Dr. Carlos Canseco (President, Rotary International), Dr. William Foege (Executive Director, Bellagio Task Force for Child Survival) and Mr. Michael Curtin (Vice President, International Development Bank). *(Photo: PAHO)*

The program is estimated to cost about $110 million over the next five years, with about one-third coming from donor countries. The funds will be used to buy vaccines, strengthen technical cooperation, develop and maintain laboratories, conduct surveillance and outbreak control activities, control the quality of vaccines, and improve the cold chain.

Contents

Among the international agencies represented at the announcement were the United Nations Children's Fund (UNICEF), the Interamerican Development Bank (IDB), Rotary International, the World Bank, the United Nations Development Fund (UNDP), the United Nations Fund for Population Activities (UNFPA), and the Agency for International Development (AID). Several of these organizations have already expressed their commitment to provide financial and technical cooperation in the eradication effort.

Support from Executive Committee

PAHO's Executive Committee supported the proposal during its June meeting in Washington by approving a resolution on poliomyelitis eradication which will be presented for ratification by all PAHO Member Governments at their Directing Council meeting in September.

The resolution urges Member Countries to accelerate their EPI programs to assure the achievement of the overall EPI objectives as well as success of the polio eradication effort, and asks them to make the needed commitment and allocate the necessary resources for program implementation. It is emphasized that immunization programs should not be implemented at the expense of efforts to develop the health services infrastructure, and that campaigns and national vaccination days should be viewed as ad hoc measures, to be gradually replaced by routine immunization services.

The resolution requests the Director of PAHO to seek additional political and material support from multilateral, bilateral and non-governmental agencies, and to initiate immediate action to assure the necessary technical and financial support.

PAHO Member Countries Back Plan

Many Ministries of Health have already expressed active support for the plan to eradicate indigenous poliomyelitis from the Americas by 1990. Following are excerpts from some of the messages sent to the Director of PAHO on the occasion of the May 14 polio announcement.

Argentina

Aldo Neri, Minister of Health and Social Action:

"...Argentina is with you in this crusade. There is nothing like a good cause to enable us to look to the future with optimism.... Polio eradication is one of those good causes. We can and shall do it."

Brazil

Carlos Correa de Menezes Sant'Anna, State Minister of Health:

"The Ministry of Health of Brazil congratulates the Pan American Health Organization for the timely initiative announced today and enthusiastically joins this widespread effort aimed at eradicating poliomyelitis in our hemisphere by 1990."

Chile

Winston Chinchón Bunting, Minister of Health:

"The Government of Chile enthusiastically supports PAHO's initiative on polio eradication by 1990 with the EPI program, and offers full support."

Peru

Carlos Bazán Zender, Minister of Health:

"The Government of Peru... wishes to express its complete agreement with the announcement on eradication of poliomyelitis from the Region of the Americas, and to assure that the Ministry of Health and all components of the health sector in Peru will fully support the fulfillment of this goal..."

Polio Facts and Figures

1969-1984	Total of 53,251 cases reported in the Americas
1972	Ten-Year Health Plan (1971-1980) for the Americas sets goal for polio control: less than 0.1 cases per 100,000 population
1975	5,969 cases reported from 19 countries
1977	EPI program launched
1984	525 cases reported from 11 countries
1984	26 countries achieve polio control
1985	PAHO announces plan to eradicate indigenous transmission of wild poliovirus in the Americas by 1990

NEWSBREAK

Argentina first country to declare national commitment to eradication plan

Argentina is the first country in the Americas to officially declare its commitment to the polio eradication effort. The Ministry of Health and Social Action, at the fifth meeting of its Federal Council on Health held in San Juan Province 4-5 July 1985, declared its national commitment to the eradication of poliomyelitis, by proposing a plan of action and establishing a national commission with the participation of provincial representatives, PAHO and UNICEF.

Poliomyelitis in the Americas, 1969-1984

The Expanded Program on Immunization (EPI) has made major advances since it was launched in the Americas in 1977. Immunization coverage approximately doubled between 1977 and 1984, rising from 25-30% to over 60% of the children at risk. As a consequence, the incidence of the six EPI diseases (measles, poliomyelitis, tuberculosis, diphtheria, tetanus and pertussis) has been greatly reduced. These achievements have been particularly dramatic in the case of polio.

Downward trend in polio cases

From 1969 through 1984 a total of 53,251 poliomyelitis cases were reported in the Americas. In the early years of this period (between 1969 an 1977), an average of 4,274 cases were reported annually; between 1981 and 1983, the average number of cases reported per year had dropped to 1,115. By 1984 only 525 cases of polio were reported in the Americas (Table 1).

Because of incomplete reporting in some countries, these figures may not represent all of the cases that actually occurred. However the downward trend is clearly evident, even though improved reporting systems in recent years have resulted in larger proportions of existing cases coming to the attention of public health authorities. All subregions in the Americas have shown a decrease in reported cases since the EPI was launched in 1977.

A breakdown of reported cases by country is shown in Table 2. Almost all countries have made notable progress in bringing polio under control. Between 1975 and 1984 there was a tenfold decrease in the number of reported polio cases, and the number of countries in the Americas reporting cases dropped from 19 to 11.

FIGURE 1. Annual reported poliomyelitis morbidity (per 100,000 population) in the Americas, 1969-1984

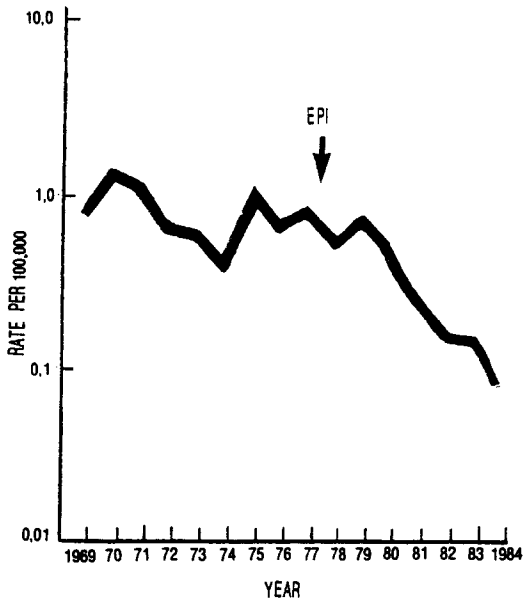


Figure 1 shows the annual incidence (per 100,000 population) of paralytic poliomyelitis for all of the Americas between 1969 and 1984. In 1984 the reported incidence for the Region fell below the goal set for 1979 in the Ten-Year Health Plan for the Americas: less than 0.1 cases per 100,000 population. Twenty-six countries had maintained incidence below this level for at least five years by 1984 (Table 3).

TABLE 1. Mean number of poliomyelitis cases reported annually in the Americas, by geographic subregion, in various periods pre-and post- EPI implementation, and percent change compared to earliest period

Region	Pre-EPI implementation 1969-1977	Stage 1 Post-EPI 1978-1980		Stage 2 Post-EPI 1981-1983		Stage 3 Post-EPI 1984	
	No.	No.	% change	No.	% change	No.	% change
Northern America	20	23	+15	9	-55	8	-60
Middle America							
Continental*	1,062	1,140	+ 7	473	-55	312	-71
English-speaking Caribbean	29	1	-97	19	-34	0	100
South America							
Tropical	3,011	2,465	-18	599	-80	205	-93
Temperate	151	22	-85	14	-91	0	-100
TOTAL	**4,274**	**3,651**	**-15**	**1,115**	**-74**	**525**	**-88**

*Includes Haiti and the Dominican Republic

TABLE 2. Number of poliomyelitis cases in the Americas, by country, 1975-1984

Subregion and Country	Mean number of cases/year		Number of cases			
	1975-1977	1978-1980	1981	1982	1983	1984
NORTHERN AMERICA						
Bermuda	—	—	—	—	—	—
Canada	1	4	—	—	—	1
United States	13	20	7	9	12	7
CARIBBEAN						
Anguilla	—	—	—	—	—	—
Antigua and Barbuda	—	—	—	—	—	—
Bahamas	—	—	—	—	—	—
Barbados	—	—	—	—	—	—
British Virgin Islands	—	—	—	—	—	—
Cayman Islands	—	—	—	—	—	—
Cuba	—	—	—	—	—	—
Dominica	—	—	—	—	—	—
Dominican Republic	63	107	72	70	7	—
Grenada	—	—	—	—	—	—
Haiti	25	16	35	35	62	63
Jamaica	—	—	—	58	—	—
Montserrat	—	—	—	—	—	—
Saint Lucia	—	—	—	—	—	—
St. Kitts-Nevis	—	—	—	—	—	—
St. Vincent and the Grenadines	—	—	—	—	—	—
Trinidad and Tobago	—	—	—	—	—	—
Turks and Caicos Islands	—	—	—	—	—	—
CONTINENTAL MIDDLE AMERICA						
Belize	—	2	—	—	—	—
Costa Rica	—	—	—	—	—	—
El Salvador	38	23	52	16	88	19
Guatemala	39	116	42	136	208	17
Honduras	78	101	18	8	8	76
Mexico	710	966	186	98	232	137
Nicaragua	26	36	46	—	—	—
Panama	—	—	—	—	—	—
TROPICAL SOUTH AMERICA						
Bolivia	138	121	15	10	7	—
Brazil	2,807	1,854	122	69	45	82
Colombia	525	305	576	187	88	18
Ecuador	45	10	11	11	5	—
French Guiana	—	—	—	—	1	—
Guyana	2	—	—	—	—	—
Paraguay	74	20	60	71	11	3
Peru	136	120	149	150	111	102
Suriname	—	—	—	1	—	—
Venezuela	44	34	68	30	—	—
TEMPERATE SOUTH AMERICA						
Argentina	2	22	5	10	26	—
Chile	—	—	—	—	—	—
Uruguay	6	—	—	—	—	—
Total	4,772	3,877	1,464	969	911	525
Number of countries reporting cases	19	18	16	17	15	11

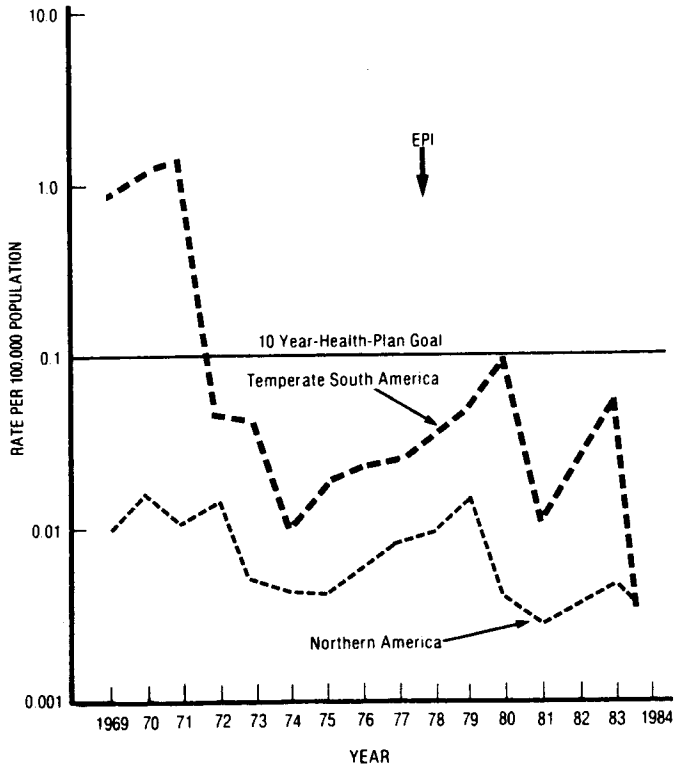
— no cases

TABLE 3: Countries in the Americas reporting poliomyelitis incidence of less than 0.1 per 100,000 population for five or more years, 1984

Anguilla	Martinique
Antigua and Barbuda	Montserrat
Bahamas	Panama
Barbados	Puerto Rico
Bermuda	Saint Lucia
Canada	St. Kitts-Nevis
Cayman Islands	St. Vincent and the Grenadines
Chile	Trinidad and Tobago
Costa Rica	Turks and Caicos Islands
Cuba	United States of America
Dominica	Uruguay
Grenada	Virgin Islands (UK)
Guadeloupe	Virgin Islands (USA)

Figures 2 and 3 show the annual reported incidence of poliomyelitis in the Americas for the same period, by geographic subregion. Northern America, the English-speaking Caribbean, and Temperate South America have achieved and maintained the goal since the early 1970's. In 1984 Tropical South America first reported rates of less than 0.1 per 100,000 population.

FIGURE 2. Annual reported poliomyelitis morbidity (per 100,000 population) in the Americas, by subregion (Temperate South America and Northern America), 1969-1984



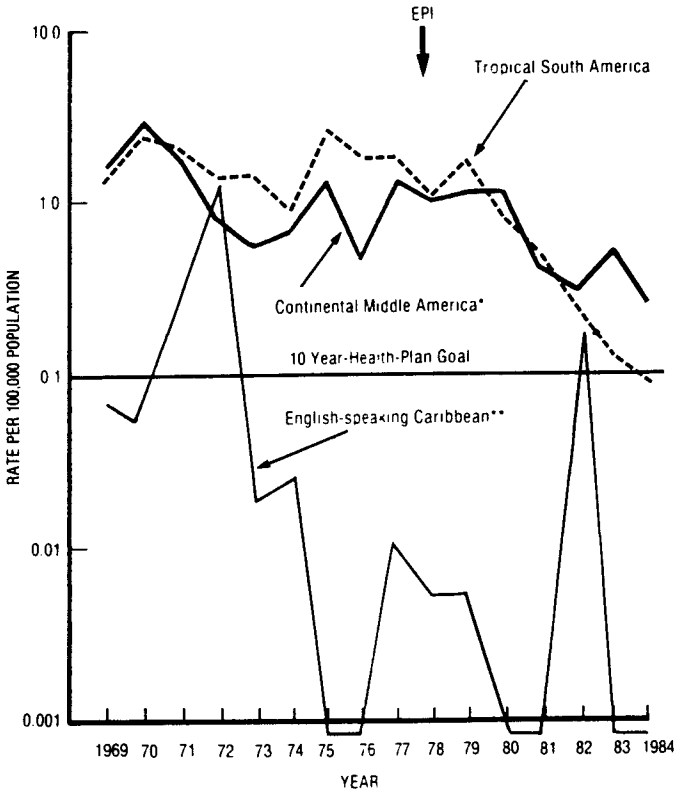
Vaccination coverage on the rise

The high degree of polio control already achieved in the Americas can mainly be credited to steadily increasing vaccination coverage of the target populations. The proportion of children under one in the Americas who have received three doses of polio vaccine increased from about 34% in 1978 to 78% in 1984 (Table 4). The use of special immunization tactics, such as national vaccination days scheduled two or three times a year, has contributed significantly to the increased vaccine coverage and decreased incidence of paralytic polio.

Goal for 1990: Zero cases

In the 1970's, program success was measured in terms of the number of countries which had achieved the Ten-Year Health Plan goal to reduce poliomyelitis incidence to less than 0.1 per 100,000 population. From here on out, success will be measured by the absence of any cases of the disease due to wild poliovirus. The high vaccination coverages already achieved in the Americas make feasible the new goal to reduce the number of cases in the Region to zero.

FIGURE 3. Annual reported poliomyelitis morbidity (per 100,000 population) in the Americas, by subregion (Tropical South America, Continental Middle America* and English-speaking Caribbean**), 1969-1984



* Includes Haiti and Dominican Republic
** Includes Cuba. Zero cases reported for 1975, 1976, 1980, 1981, 1983 and 1984.

TABLE 4. Poliomyelitis vaccination coverages (3rd dose) of children under one year of age in the Americas, by country, 1978-1984

Subregion and Country	1978	1979	1980	1981	1982	1983	1984
NORTHERN AMERICA							
Bermuda	...	...	39	...	68	53	48
Canada[a]	...	...	...	...	...	...	...
United States[a]	...	...	...	...	...	...	...
CARIBBEAN							
Anguilla	77	48	86	81	86	99	73
Antigua and Barbuda	53	...	36	47	90	99	93
Bahamas	99	27	35	40	67	65	62
Barbados	56	60	99	54	63	62	77
British Virgin Isl.	...	14	95	70	94	75	85
Cayman Islands	31	52	47	63	91	90	90
Cuba[b]	99	97	99	82	82	95	99
Dominica	20	31	53	97	73	92	82
Dominican Republic	28	35	46	42	37	22	99
Grenada	...	6	32	41	61	72	75
Haiti	1	3	2	3	7	6	12
Jamaica	...	...	34	37	68	47	56
Montserrat	63	5	38	55	95	95	82
Saint Lucia	32	...	58	65	81	80	84
St. Kitts-Nevis	...	25	76	71	93	91	97
St. Vincent and the Grenadines	5	...	26	33	99	84	90
Trinidad and Tobago	45	28	38	55	59	61	66
Turks and Caicos Isl.	...	21	44	27	80	79	70
CONTINENTAL MID AMERICA							
Belize	45	42	21	51	52	61	54
Costa Rica	58	44	67	85	78	54	81
El Salvador[b]	...	57	42	38	42	48	44
Guatemala[b]	...	62	43	42	45	44	37
Honduras	7	25	32	37	53	70	84
Mexico	...	11	43	85	85	74	91
Nicaragua	18	...	99	52	50	30	73
Panama	41	57	45	50	61	60	70
TROPICAL SOUTH AMERICA							
Bolivia	3	12	14	15	15	11	57
Brazil[b]	34	49	99	99	99	99	89
Colombia	17	19	16	22	27	42	60
Ecuador	10	16	14	19	36	34	36
Guyana	31	37	42	37	73	59	41
Paraguay	2	5	14	26	39	47	59
Peru	21	19	16	20	23	18	26
Suriname	...	20	24	22	53	83	79
Venezuela	83	88	95	75	77	67	59
TEMPERATE SOUTH AMERICA							
Argentina	...	5	31	38	94	94	64
Chile	98	97	91	93	98	93	87
Uruguay[b]	52	58	59	58	72	74	83
TOTAL	34	34	59	69	74	72	78

[a] Canada and U.S. do not provide figures for children under one.
[b] Second instead of third-dose data.
... Data not available

Reported Cases of EPI Diseases

Number of reported cases of measles, poliomyelitis, tetanus, diphtheria and whooping cough, from 1 January 1985 to date of last report, and for same epidemiological period in 1984, by country

Subregion and Country	Date of last report	Measles		Poliomyelitis		Tetanus				Diphtheria		Whooping Cough	
						Non-neonatorum		Neonatorum					
		1985	1984	1985	1984	1985	1984	1985	1984	1985	1984	1985	1984
NORTHERN AMERICA													
Canada	20 Apr.	356	970	—	—	—	—	...	...	2	1	382	383
United States	15 Jun.	1,599	1,415	2	1	28**	18**	...	...	1	—	668	401
CARIBBEAN													
Antigua and Barbuda	18 May	1	...	—	...	—	...	1	...	—	...	—	...
Bahamas	15 Jun.	16	19	—	—	4	1	—	—	—	—	1	—
Barbados	20 Apr.	1	...	—	...	—	...	—	...	—	...	—	...
Cuba	*	...	...	...	...	...	...	...	...	...	...	...	...
Dominica	15 Jun.	40	—	—	—	—	—	—	—	—	—	—	—
Dominican Republic	*	...	...	...	...	...	...	...	...	...	...	...	...
Grenada	15 Jun.	6	5	—	—	—	—	—	—	—	—	—	—
Haiti	*	...	...	...	...	...	...	...	...	...	...	...	...
Jamaica	26 Jan.	...	13	...	—	...	—	...	—	...	—	...	—
Saint Lucia	23 Feb.	3	...	—	...	—	...	—	...	—	...	—	...
St. Christopher-Nevis	18 May	22	1	—	—	—	—	—	—	—	—	—	—
St. Vincent and the Grenadines	23 Feb.	1	1	...	—	...	—	...	—	...	...	1	—
Trinidad and Tobago	23 Feb.	455	908	—	—	1	—	—	—	—	—	—	—
CONTINENTAL MIDDLE AMERICA													
Belize	18 May	4	—	—	—	2	—	—	—	—	—	28	—
Costa Rica	23 Feb.	—	—	—	—	—	—	...	...	—	—	20	54
El Salvador	23 Feb.	636	518	...	4	12	15	5	3	...	5	31	42
Guatemala	18 May	945	...	6	...	22	...	2	...	8	...	477	...
Honduras	18 May	3,290	331	1	7	3	5	2	2	—	—	74	139
Mexico	*	...	...	...	...	...	...	...	...	...	...	...	...
Nicaragua	*	...	...	...	...	...	...	...	...	...	...	...	...
Panama	23 Mar.	48	109	—	—	—	1	1	2	—	—	6	56
TROPICAL SOUTH AMERICA													
Bolivia	*	...	...	...	...	...	...	...	...	...	...	...	...
Brazil	23 Feb.	8,562	7,915	2	—	316	352	75	85	313	451	3,410	3,192
Colombia	*	...	...	...	...	...	...	...	...	...	...	...	...
Ecuador	23 Mar.	597	2,863	—	—	15	16	19	14	7	13	191	127
Guyana	23 Feb.	13	2	...	...	1	2	...	...	—	—	—	—
Paraguay	18 May	67	124	2	—	18	30	13	32	5	4	180	140
Peru	*	...	...	...	...	...	...	...	...	...	...	...	...
Suriname	*	...	...	...	...	...	...	...	...	...	...	...	...
Venezuela	20 Apr.	10,840	3,118	—	—	—	...	—	...	3	1	508	366
TEMPERATE SOUTH AMERICA													
Argentina	23 Mar.	2,425	1,206	—	2	—	56**	...	...	1	1	2,011	4,635
Chile	15 Jun.	1,834	1,446	—	—	14**	14**	...	...	69	40	563	183
Uruguay	23 Feb.	7	—	—	—	—	1	—	—	—	—	6	20

— No Cases

... Data not available

* No 1985 reports received

** Total tetanus cases; tetanus neonatorum not reported separately.

Why Polio?

The success of the campaign to eradicate smallpox from the world, achieved in 1978, led public health officials to focus on the question of what other diseases might be potential candidates for eradication. Before serious consideration can be given to the global eradication of a disease, however, one of the most important requirements is to show that it can be eliminated from large geographic areas.

The impressive reduction in the number of cases of poliomyelitis in the the Americas over the last several years, due to increasingly higher levels of vaccination coverage, paved the way for the proposal to eradicate the indigenous transmission of wild poliovirus in the American hemisphere by 1990.

Other characteristics of polio which make it suitable for regional—and potentially global—eradication are the existence of safe, effective and low-cost vaccines, and the fact that there are no animal vectors or reservoirs of the disease. Furthermore, the high costs of medical care for the acute stage and long-term rehabilitation—as well as the incalculable costs of human suffering and lost productivity—make polio eradication a cost-effective measure in any terms. In the Americas, the savings in medical costs alone are estimated to be twice the projected costs of this effort from now to 1990.

Highlights from the Plan of Action on Polio Eradication

PAHO's plan for polio eradication emphasizes the importance of working within established EPI programs, and incorporating special vaccination strategies as indicated by each country's epidemiological situation.

Objectives

The plan's three primary objectives are:

- To promote the overall development of the Expanded Program on Immunization in the Region, to speed up the attainment of its objectives.
- To eradicate indigenous transmission of wild polioviruses in the American Region by 1990.
- To set up a surveillance system at regional and national levels, so that all suspected cases of poliomyelitis will be investigated immediately and appropriate control measures implemented rapidly to stop transmission.

Strategies

The major strategies to be adopted in this effort are:

1) Mobilization of national resources;
2) Achievement and maintenance of vaccine coverages of greater than 80% of the target population;
3) Surveillance activities adequate to detect all suspected cases of poliomyelitis, with subsequent thorough investigation and institution of control measures;
4) Laboratory support available to all countries, to permit laboratory studies of all suspected cases of poliomyelitis reported;
5) Information dissemination within countries and throughout the Region;
6) Identification of research needs with subsequent funding for execution;
7) Development of a certification protocol to declare the countries and the Region free of indigenous transmission; and
8) Evaluation of all ongoing program activities.

The *EPI Newsletter* is published bimonthly, in English and Spanish, by the Expanded Program on Immunization (EPI) of the Pan American Health Organization (PAHO), Regional Office for the Americas of the World Health Organization (WHO). Its purpose is to facilitate the exchange of ideas and information concerning immunization programs in the Region in order to promote greater knowledge of the problems faced and their possible solutions.

References to commercial products and the publication of signed articles in this newsletter do not constitute endorsement by PAHO/WHO, nor do they necessarily represent the policy of the Organization.

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