

EPI Newsletter

Expanded Program on Immunization in the Americas

Volume VIII, Number 3

IMMUNIZE AND PROTECT YOUR CHILD

June 1986

Polio in the Americas, First Semester 1986

During the first half of 1986 (weeks 1-26, ending 28 June), 537 cases of poliomyelitis were reported to EPI/PAHO from seven countries in the Americas. For the same period in 1985 there were 280 cases reported from eleven countries (figure 1). Brazil, Colombia and Guatemala are reporting considerably higher numbers of cases this year than last, accounting for most of the 1986 increase. Four of the countries which reported cases in 1985 have been

polio-free thus far in 1986: El Salvador, Honduras, Paraguay and the United States.

A breakdown by country shows that over two-thirds of the 1986 cases reported in the Americas came from Brazil (figure 2). Almost 70% of Brazil's cases have occurred in the northeastern region of the country (see article beginning on page 4).

FIGURE 1. Reported number of polio cases in the Region of the Americas by country, weeks 1-26, 1986

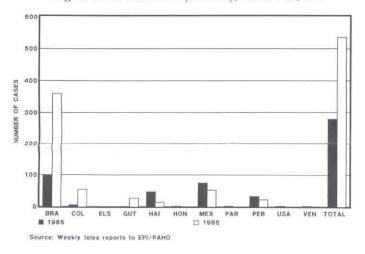
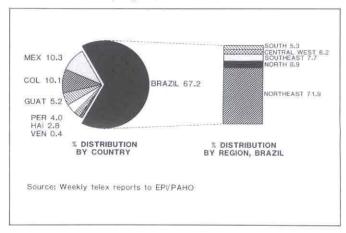


FIGURE 2. Distribution of reported polio cases in the Region of the Americas by country, and within Brazil by region, weeks 1-26, 1986



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Latin American EPI Managers Meet in Washington, D.C.

The Pan American Health Organization hosted the third meeting of Latin American EPI managers at its Washington D.C. headquarters from 12 to 16 May. The last Latin American EPI managers' meeting was held in Lima in March 1984.

Immunization managers from 20 Latin American countries, as well as Aruba and Curacao, attended the meeting, together with representatives from UNICEF, USAID, IDB, and Rotary International. The objectives of the meeting were as follows:

- to evaluate progress made since the 1984 meeting, identifying and analyzing the strategies used in each country to increase immunization coverage;
- to propose quantifiable targets for immunization coverage in 1986;
- to identify the measures required to interrupt wild poliovirus transmission in each country in a short period of time, and set up the epidemiological surveillance systems needed to measure program impact;
- to revise the plans of action proposed by each country to attain these goals, assuring the inclusion of requests for technical cooperation from external

sources such as PAHO, UNICEF, AID, IDB, and Rotary International;



EPI Managers meet in small working groups to exchange ideas and experiences during the May meeting at PAHO's Washington, D.C. headquarters.

TABLE 1. 1985 vaccination coverage and 1986 coverage targets in children under 1 year of age, Latin America

	POLIO		DPT		MEA	SLES	BCG	
Country	85 cov.	86 tar.	85 cov.	86 tar.	85 cov.	86 tar.	85 cov.	86 tar
Argentina	69	70	63	70	67	70	89	90
Aruba/Netherland Antilles		85		85	* * *	60		_
Bolivia	30	60	33	60	21	60	24	60
Brazil	86	90	62	80	63	80	58	75
Colombia	62	80	61	80	53	80	* * *	80
Costa Rica	75	90	75	90	81	90	85	90
Cuba	88	100	91	100	85	100	98	100
Chile	89	100	89	100	91	100	90	96
Dominican Rep.	18	100	18	100	24	100	51	100
Ecuador	39	70	41	60	54	60	99	100
El Salvador	54	90	54	90	71	90	50	90
Guatemala	21	80	21	67	23	52	30	60
Haiti	19	35	19	35	21	35	57	65
Honduras	58	75	59	75	53	75	65	75
Mexico	67	90	40	90	64	100	16	100
Vicaragua	70	95	35	80	49	80	97	95
Panama	71	85	73	85	83	90	94	90
Paraguay	97	90	54	80	46	100	99	80
Peru	47	80	48	80	53	80	70	80
Uruguay	58	95	63	95	59	95	92	100
Venezuela	59	75	49	75	56	80		90

^{...} Not available

Source: National EPI questionnaires and plans of action prepared for 3rd Latin American EPI Managers Meeting,

___ Target not set

 to identify the resources necessary for program development between now and 1990, including those to be requested from external sources.

Six hours of plenary sessions were held on the role of social mobilization in increasing immunization coverage. UNICEF experts presented the conceptual framework for this subject, followed by case studies in Ecuador and Nicaragua, and the results of a study made by the University of Buenos Aires School of Public Health. A plenary session was also held on poliomyelitis surveillance.

Table 1 (see page 2) shows each country's vaccination coverage in children under 1 year of age in 1985, as compared to the 1986 coverage targets designated in the national plans of action.

Further meetings will be held at national level to review the plans of action in conjunction with the agencies involved in immunization efforts in each country.

Immunization managers will be meeting annually from now until 1990 to chart program progress, with particular attention to the goal of stopping transmission of wild poliovirus in the Region of the Americas by 1990.

Polio Eradication Activities in Brazil

Technical Meeting on Polio Eradication

Brazil's National Secretariat for Basic Health Services (SNABS) organized a meeting 23-24 January 1986 to examine preliminary technical documents and discuss operational strategies to achieve the proposed eradication of polio virus transmission in the country. The meeting was attended by representatives of eight state health secretariats in addition to various Ministry of Health agencies, the National Enterovirus Reference Center (FIOCRUZ), the Interinstitutional Planning Commission (CIPLAN), Brasilia University, and the Brazilian Pediatrics Society.

The results of the meeting were as follows:

- Several amendments were made in the document "Plan of Action for Eradication of the Transmission of Polio in Brazil," which in its revised version is to become the guide to nationwide measures to achieve that goal.
- The criteria for classifying reported polio cases were revised in accordance with the recommendations of the 2nd Meeting of the PAHO Technical Advisory Group (TAG). The most important of these were the need to focus efforts on the detection of suspected cases in children under 15 years of age, and suspension of the *inconclusive* case category which, although useful for a retrospective study of the surveillance system, is of little value in the phase of active surveillance, when cases must be conclusively confirmed or discarded.
- Detailed technical standards will be provided in the publication "Technical Basis for the Eradication of Polio," currently under review, which will update a 1982 document.
- The 1986 national polio vaccination days were scheduled for 14 June and 16 August and, as in earlier years, all children in the 0-4 year age group are to be immunized.
- A timetable of 1986 activities was established which includes a national seminar on 12-14 March to stress

the technical-operational aspects of polio eradication (see below). In addition, courses were proposed for program managers and laboratory technicians.

National Seminar on Polio Eradication

A National Seminar on Poliomyelitis Eradication was held on 12-14 March 1986 in Brasilia, promoted by the Ministry of Health's National Secretariat for Basic Health Services (SNABS).

Using the methodology of presentations and panels in plenary sessions followed by group work and discussions, the seminar focused on technical and administrative ways to speed up implementation of polio eradication measures.

The seminar was attended by 164 technicians in the areas of epidemiology, polio eradication, health education, and social communication, from all the state secretariats of health; members of the Interinstitutional Commission for the Coordination of Measures to Eradicate Poliomyelitis; technicians of the Regional Reference Laboratories for Polio Diagnosis; technicians of SNABS, representatives of various Ministry of Health agencies; and consultants of the Pan American Health Organization.

Two technical documents were presented as a basis for group discussion: the Plan of Action and Technical Bases for Eradicating Polio Transmission in Brazil and a Proposal for Health Education and Social Communication. The participants also heard reports on the experiences of some states in their implementation of the proposed measures.

The conclusions and recommendations of the different working groups are under study in SNABS. Among subjects discussed were the difficulties of implementing epidemiological surveillance activities, particularly those for active case-finding, due to deficiencies in health service infrastructure, which makes it necessary to reinforce the responsible technical teams. It was also found that the network of supporting laboratory services for polio diagnosis would have to be made more efficient so that test results can be provided promptly.

It was found that the strategy of national vaccination days would have to be reviewed, based on the identification of the causes of the progressively lower coverages of the last campaigns. For purposes of eradication, it is essential that the campaigns this year regain the levels achieved in 1980. Measles and DPT vaccines will continue to be administered in conjunction with polio vaccine, in accordance with the judgement of the health secretariats on the particular situation in each state. There was also much emphasis on the need to strengthen regular vaccination programs. Special attention must be given to the evaluation of vaccination coverages by means of accurate records of doses administered both routinely and in campaigns, or through periodic sample surveys.

It was considered essential that health education and social communication activities be integrated at all levels. These should be directed to both the population at large and to health professionals in order to make them aware of the polio eradication proposal.

The working groups emphasized that insofar as possible these measures should be carried out as part of the Integrated Health Measures (AISs) together with other measures for the control of communicable diseases and for operation of the network of health units. It is necessary to redirect operations in states where AIS funds are used only to pay for medical consultations, with little emphasis on preventive measures. Several groups expressed the view that technicians in communicable disease control should participate in the planning and administration of AIS funds.

Editorial note: Brazil has actively embraced the poliomyelitis eradication goal as shown by the large number of activities already carried out in the first semester of 1986. In January 1986 the Ministry of Health began publishing a weekly report on all poliomyelitis activities in the country, from which the above articles were taken. The twopage report gives up-to-date information on the polio situation in each region of the country, including reports on surveillance and outbreak control measures. Each issue

POLIOMIELITE

informe semanal

MINISTÉRIO DA SAÚDE SNABS

CASOS NOTIFICADOS DE POLIOMIELITE. SEGUNDO O ANDAMENTO DA INVESTIGAÇÃO EPIDEMIOLÓGICA.

POR GRANDES REGIÕES E UNIDADES DA FEDERAÇÃO – 8 R A S I L. 1 9 8 6

GRANDES REGIÕES	NOTIFICA DOS		CLASSIFICAÇÃO SEGUNDO O ANDAMENTO DA INVESTIGAÇÃO							
UNIDADES DA			PEND	ENTES						
FEDERAÇÃO	NA SEMANA	ACUMULADO	SUSPEITOS	PROVÁVEIS	CONFIRMADOS	DESCARTADO				
BRASIL	51	481	122	240	98	21				
NORTE	_	41	10	24	6	1				
RONDONIA	-	15	?	10	3					
ACRE	-	1	-	1	-	-				
AMAZONAS	-	8	-	7	1	-				
RORAIMA	-	-	-	***	-	-				
PARÁ	-	17	8	6	2	1				
AMAPA		<u> </u>								
NORDESTE	39	339	88	162	81	8				
MARANHÃO		2	2							
PIAUI "	-	14	-	14	-	-				
CEARA	2	57	13	?8	11	5				
RIO GRANDE DO NORTE	5	34	1	16	15	2				
PARAIBA	5	13	4	6	2	1				
PERNAMBUCO	•	48	13	27	8	-				
ALAGDAS	2	48	8	18	23	-				
FERNANDO DE NORONHA		-	-	-	-	-				
SERGIPE	3	44	7	20	17	-				
BAHIA	18	78	40	33	5					
SUDESTE	8	35	6	20	6	3				
MINAS GERAIS	4	13	2		2	2				
ESPÍRITO SANTO	_	3	3	-	-	-				
RIO DE JANEIRO	2	12	1	8	3	-				
SÃO PAULO	. 2	7		- 6	1	1				
SUL	_	27	4	17	1	5				
PARANA	-	12	2	9	-	. 1				
SANTA CATARINA	-	1	_	1	-	-				
RIO GRANDE DO SUL	-	14	2	7	1	4				
CENTRO-OESTE	4	39	14	17	4	4				
MATO GROSSO DO SUL	_	7	5	-	1	1				
MATO GROSSO	-	1	-	1	-					
GOIÁS .	2	22	9	9	.2	2				
DISTRITO FEDERAL	2	9	_	7	1	1				

Each issue of Brazil's Poliomyelitis Weekly Report, shown above, includes a table showing the classification of all reported

also includes a table showing the number of cases reported from each state for the week, the cumulative number of cases for the year, and the current classification of each case as suspected, probable, confirmed or discarded.

Source: Poliomyelitis Weekly Report (Ministry of Health, SNABS, Brazil), 1(6) and 1(12), 1986.

Polio Incidence Rises in Brazil's Northeast

Data reported to the Ministry of Health on poliomyelitis occurrence through week 15 in 1986 indicated major disease activity throughout the Northeast Region of the country. Outbreaks of considerable intensity were reported at Fortaleza/Ceará and Arapiraca-Alagoas. In response to the outbreaks, vaccination campaigns were carried out in March which covered the metropolitan area

of Fortaleza and the entire state of Alagoas. Several other blocking operations were carried out in the interior of Ceará and Piauí, in neighborhoods of the city of Natal/ Rio Grande do Norte, and at Aracaju/Sergipe.

Despite these measures, which reflect more active response of the surveillance services and more rapid implementation of control measures, the number of cases reported in the region continued to rise, particularly in week 12, peaking at 34 cases reported in week 14. Of the 200 known cases in the country by week 15, 153 (76.5%) were in the Northeast compared with only 22 cases reported in that region during the same period in 1985.

The geographic distribution of these cases revealed that the disease was widely spread in different areas of each state, as shown in figure 1. The available laboratory findings showed circulation of poliovirus type 3 in Alagoas and Pernambuco (Araripina) and type 1 in Ceará (Fortaleza) and Pernambuco (Gravatá).

It became evident that this situation could not be controlled by focal vaccination operations. In view of the fact that the National Vaccination Day scheduled for 14 June was still more than two months away, it was decided that emergency measures were needed to organize a large-scale vaccination campaign throughout the Northeast.

On 8 April the Minister of Health convened an emergency meeting of the health secretaries of the northeastern states in Recife. Despite the operational difficulties raised, particularly with regard to the rainy season and the absence of federal assistance for promotional activities, a vaccination day for the Northeast was organized for 19 April. Most of the states which experienced operational difficulties due to the rain subsequently decided to extend the vaccination period to the entire week in areas where coverage was found to be very low.

The Ministry of Health distributed 5.8 million doses of oral polio vaccine to the state health secretariats, with the

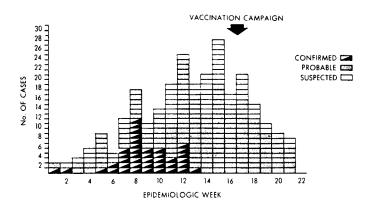
FIGURE 1. Map of reported polio cases in Brazil's Northeast Region, by case classification, weeks 1-15, 1986



expectation that approximately five million children under 5 years of age would be vaccinated. Although vaccination was not carried out in all areas of every state, available data show the following coverages in children 0-4 years of age in areas where the vaccine was given: Maranhao 81%, Piauí 82%, Ceará 29%, Rio Grande do Norte 89%, Caraiba 86%, Pernambuco 73%, Alagoas 95%, Sergipe 85%, and Bahia 88%.

The vaccination day took place at the end of week 16. Two weeks afterwards (the average incubation period of the disease) a progressive decrease in the number of reported cases began to be observed. At week 22 figure 2 shows the number of suspected, probable and confirmed cases of polio in the Northeast Region, by week of disease onset. The graph should be interpreted with caution as it does not take into account variation from state to state, but the downward trend is clearly evident.

FIGURE 2. Reported polio cases, by week of onset and case classification, Northeast Region, Brazil, weeks 1-22, 1986



Source: Poliomyelitis Weekly Report (Ministry of Health, SNABS, Brazil), 1(15), 1(17), and 1(20), 1986.

Editorial note: The control measures instituted in response to the polio outbreak in Brazil's Northeast Region were partially based on guidelines for polio surveillance and control activities developed by the Ministries of Health of Brazil and Mexico in collaboration with PAHO. The guidelines were developed in accordance with recommendations of the last Technical Advisory Group (TAG) meeting held in Mexico in January 1986. The principles spelled out in the guidelines are currently being tested in these and other countries in the Region. They particularly focus on the sensitivity of the case definitions recommended in the Plan of Action for Polio Eradication as well as the appropriate geographical extent of containment actions. Results of Brazil and Mexico's current experiences will be discussed at the next TAG meeting, planned for September 1986 in Brasilia, in order to determine the most effective strategies for the control and eradication of polio in the Region.

Rotary Supports National Vaccination Days

Rotary vaccine, equipment and volunteers vital to Guatemalan effort

The Rotary Foundation of Rotary International and Guatemalan Rotarians are providing polio vaccine, cold chain equipment, promotional materials, and volunteers to assist a national immunization effort to protect over one million Guatemalan children under 5 years of age against measles, polio, diphtheria, whooping cough and tetanus.

The Guatemalan Ministry of Health is staging three series of immunization days, 17-18 May, 5-6 July, and 16-17 August, with the collaboration of four donor agencies in a program called "Juntos por la Salud de los Niños" (Together for Children's Health). In addition to Rotary, the donors include UNICEF, which is supplying measles and DPT vaccine, cold chain equipment and promotional support. The Pan American Health Organization is training government health workers and, with the assistance of Guatemalan Rotarians, will help evaluate the effort. The U.S. Agency for International Development (A.I.D.) has donated vehicles and cold chain equipment.

Over 6,200 immunization posts were set up for the first immunization day when health workers administered vaccines with the assistance of the 13 Rotary Clubs of Guatemala and other volunteers. More than 460 Guatemalan Rotarians participated in the effort.

Results of the first vaccination day showed that 1,017,807 children, or 71% of the target age group, were vaccinated with polio, measles, and DPT vaccines on 17-18 May. Among children under 1 year of age—the most susceptible age group for the EPI diseases—coverage was approximately 27% with measles vaccine, 43% with DPT, and 71% with polio vaccine (1st, 2nd, or 3rd doses).

Close contact among all the country's Rotary Clubs allowed them to quickly identify and solve operational problems such as lack of ice or exhausted vaccine stocks. Where Rotarians could not be present, Boy Scouts and Lions Club members were recruited to help, illustrating Rotary's ability to mobilize resources from other private voluntary groups.

Rotary developed a series of questionnaires to evaluate activities at 560 vaccination posts throughout the country. They found that the cold chain was well maintained and sufficient stocks of vaccines were available at most of the posts visited. The major problem identified was an average waiting time of 40 minutes for mothers who brought their children to be vaccinated, compared with only about 4 minutes to actually administer the vaccine. In order to reduce the waiting time for the second vaccination day, it has been recommended to increase the number of vaccination posts.

Rotary International has invited Peru and Ecuador to send a Rotary representative to observe the second or third National Vaccination Day in Guatemala, so that these



Guatemalan Rotarians were instrumental in planning and carrying out the country's first National Vaccination Day on 17-18 May 1986. Over one million children were vaccinated in the effort.

countries can profit from the Guatemalan experience in carrying out their own National Vaccination Days.

The immunization effort in Guatemala is part of Rotary's PolioPlus Program to protect the world's children against polio and other vaccine-preventable children diseases. To date, the Rotary Foundation has allocated more than \$12 million for PolioPlus immunization projects in 26 nations to protect more than 87 million children.

Source: Rotary International press release, 15 May 1986; Final report on first vaccination day, Ministry of Public Health and Social Welfare, Guatemala, June 1986; participation of Guatemalan Rotary Clubs in First National Vaccination Day, Rotary Foundation of Rotary International, June 1986.

Rotary Club members support Mexico's mission against polio

Members of Mexico's Rotary Clubs played a key role in carrying out activities associated with the 1986 National Vaccination Days held on 18 January and 15 March. Using a combination of fixed vaccination posts and mobile teams, over 90% of children under 5 years of age were vaccinated with oral poliomyelitis vaccine (OPV). Among children under 1 year of age, 71% were vaccinated on the first day, and 76% on the second.

Preparations for the two National Vaccination Days were interrupted by the devastating earthquake which struck Mexico in September 1985. It temporarily forced national health authorities to shelve the immunization plan, while all available health resources were redirected to handle relief operations.

Reported Cases of EPI Diseases

Number of reported cases of measles, poliomyelitis, tetanus, diphtheria and whooping cough, from 1 January 1986 to date of last report, and for same epidemiological period in 1985, by country

						Tetanus							· · · · · · · · · · · · · · · · · · ·
	Report	Measles		Polio- myelitis§		Non-neonatal		Neonatal		Diphtheria		Whooping Cough	
Subregion and Country	for week ending	1986	1985	1986	1985	1986	1985	1986	1985	1986	1985	1986	1985
				<u> </u>		<u> </u>							
NORTHERN AMERICA				1									
Canada	*			-			•••		•••	• • • •	• • •		•••
United States	14 Jun.	3,522	1,599	-	3	20	28	**	_	_	1	1,180	668
CARIBBEAN													
Antigua & Barbuda	19 Apr.	-	1	-	_	 	_	**	1	<u> </u>	· <u></u> .	1	
Bahamas	17 May.	17	14	-	_	_	4	**	_	_	-	_	1
Barbados	19 Apr.	_	1	i —		1	-	-	-		-	-	·
Cuba	*		• • •	<u> </u>	_		•••		•••		• • • •		• • • •
Dominica	19 Apr.	18	22	-		–	-	**	_	_		-	_
Dominican Republic	*			-			• • •		• • •		• • •		• • •
Grenada	17 May.	3	6	· —	_	_	-	**	-,		-	7	
Haiti	*		• • •	15	48		•••		• • •		• • •		• • • •
Jamaica	25 Jan.	6	•••	-	_			-	• • • • •	-	•••	_	• • •
St. Christopher/Nevis		4	22		-	_	ina sajan, kudi		en e			1	- -
Saint Lucia	22 Feb.	1	3	_		-		-		_	v a j.	-	
St. Vincent and													
the Grenadines	*			-	_		•••		• • •		• • •		
Trinidad & Tobago	22 Mar.	1,013	•••	-		1	• • •	-	• • •	-	• • •	4	•14 •
CONTINENTAL MID AMER	ICA					ļ	•	1					
Belize	17 M ay.	14	4	_	_	_	2	**		_	- <u></u>	7	28
Costa Rica	*			_		1	• • •						
El Salvador	*	l	•••		1				•••		• • •		
Guatemala	19 Apr.	651		31		15	•••	1				189	
Honduras	19 Apr.	286		28	2	2		4		_		33	
Mexico	*			53	76								
Nicaragua	22 Mar.	440		-	_					_		85	
Panama	*			_									
TROPICAL SOUTH AMERIC	CA.			1									
Bolivia	*			_		l							
Brazil	19 Apr.	15,829	17.099	361	15	510	626	128	183	404	794	5,448	6,561
Colombia	*	10,025		55	6					l			
Ecuador	*			_				,					
Guyana	*			_	_		•••						
Paraguay	22 Mar.	116	47	_	3	12	6	12	8	4	3	50	137
Peru	22 Feb.	7		23	34	_	•••	3		1	• • •	14	
Suriname	*	ł		_	_		•••						
Venezuela	19 Apr.	1	10,840	2	3	l –	_	**		_	3	859	508
TEMPERATE SOUTH AMER													
Argentina	22 Feb.	698	1,821			17	16	**	**	7	1	446	1,582
Chile	22 Feb. 19 Apr.	3,054	1,168		_	6	_	**	_	48	35	10	519
ž	19 Apr. *	1				ł							
Uruguay			• • •				•••		•••	l	•••	l	•••

^{*} No 1986 reports received.

-No Cases

... Data not available

^{**} Tetanus data not reported separately for neonatal and non-neonatal cases.

Total tetanus data is reported in non-neonatal column.

[§] Data for polio is through week 26 (ending 28 June).

In early October, a US\$1.25 million grant from The Rotary Foundation of Rotary International's PolioPlus Program helped revive immunization plans. Funds earmarked for the first year were used to purchase 32 million doses of oral polio vaccine, 900 refrigerators, and more than 120,000 posters announcing the vaccination dates.

Mexican Rotarians formed a national PolioPlus Committee to coordinate activities. Each Rotary club president received packets containing a list of recommended support activities, a fact sheet on polio vaccination, and publicity materials. Clubs were advised to contact local health authorities to see how they could help. The packet included a simple report form to be filled out and mailed to the PolioPlus Committee after each vaccination day. Each district governor received a notice reminding him of the approaching National Vaccination Days.

As the first vaccination day approached, Rotarians became concerned that news of the vaccination program had not reached all the public in this sprawling country of 80 million. The Ministry and other government chanels were still tied up with the earthquake relief efforts. Club members secured the commitment of a leading Mexico City newspaper to run free front-page advertisements publicizing their efforts and other papers quickly followed suit. Rotarians also put up posters and placed radio announcements to encourage participation.

On 18 January a motorcade of Rotarians traveled to the Government Palace, where they joined Mexico's First Lady Paloma Cordero de la Madrid and other national leaders in an inaugural ceremony televised nationwide by satellite. Similar ceremonies were performed simultaneously in 32 state capitals.

Across the country thousands of Rotarians, their wives, and children turned out to help. At the vaccination posts, they filled out report forms, provided instruction to parents, and administered the vaccines. Other Rotarians went house to house, checking to see that all children had been immunized. Club members also provided vehicles and drivers to transport the vaccine supplies. Together with local health supervisors, they visited vaccination posts to



Mexico's National Polio Vaccination Days were widely publicized with posters such as the one shown

solve any operational problems. They joined with members of Lions clubs, Jaycees, Boy Scouts, and other service organizations to give an unprecedented privatesector boost to the government's efforts.

Mexico's second immmunization day was just as successful as the first, with even more children vaccinated nationwide. Some of the activities carried out by local clubs included putting up posters and making announcements from loudspeaker trucks, providing manpower and vehicles to deliver cold boxes and ice, and offering prizes to school children for art work related to polio immunization. These and other activities helped health workers to reach areas that had never been covered by immunization programs in the past.

The Rotarians of Mexico worked together to help children even in the remotest areas of their country. They will again take up their ice boxes and vaccine next year to continue the fight. Despite the obstacles, they are determined to make polio a disease of the past.

Source: Based on Mexico's Mission Against Polio, by Michael McQuestion and Paige Carlin, in *The Rotarian*, June 1986.

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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ISSN 0251-4710





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