directing council *regional committee*

PAN AMERICAN HEALTH ORGANIZATION

WORLD HEALTH ORGANIZATION

XXXVI Meeting XLIV Meeting

Washington, D.C.
September 1992

Provisional Agenda Item 5.3

CD36/13 (Eng.)
15 July 1992
ORIGINAL: ENGLISH

PLAN OF ACTION FOR THE ERADICATION OF THE INDIGENOUS TRANSMISSION OF WILD POLIOVIRUS FROM THE AMERICAS

The 109th Meeting of the Executive Committee reviewed the progress report presented by the Director of the Pan American Sanitary Bureau on the progress achieved by the Expanded Program on Immunization (EPI) and towards the eradication of indigenous transmission of wild poliovirus from the Americas.

The report noted that immunization coverage levels continued to increase in most countries and that there is monitoring of coverage at district or county level. This allows program managers to direct resources to those areas at highest risk. For the first time data was presented on the vaccination of women of childbearing age in the areas at risk for neonatal tetanus, and the Committee noted the impact already made in reduction of the disease. The initiatives to aggressively control measles--such as the ones initiated in Cuba, the English-speaking Caribbean, and more recently in Chile and Brazil, as well as the one planned by the Central American countries--were discussed. It was noted that lack of funds is still impeding the smooth implementation of the one in Central America

The Committee recognized that poliomyelitis is on the verge of being eradicated in the Americas, a major accomplishment for all Member Countries, and praised all the health workers of the various countries for their tremendous dedication and efforts to achieve this goal, which has increased the prestige of the health sector. In spite of the gains achieved so far, it was noted that this final phase is the most difficult one and that additional efforts will be necessary to achieve and maintain the polio-free status.

In this regard, the Committee expressed its concern that international resources have either diminished or have not yet been identified for the new phase which the EPI is now entering. This new phase includes the consolidation and certification of polio eradication, the control of measles and neonatal tetanus, and the possible inclusion or expansion of the use of new vaccines, such as hepatitis B and Haemophilus influenzae B.

The XXXVI Meeting of Directing Council is requested to review the annexed reports (Document CE109/13 and ADD. I) and consider the resolution proposed by the 109th Meeting of the Executive Committee, as follows:

RESOLUTION VIII

IMPLEMENTATION OF THE EXPANDED PROGRAM ON IMMUNIZATION AND THE PLAN OF ACTION FOR THE ERADICATION OF INDIGENOUS TRANSMISSION OF WILD POLIOVIRUS FROM THE AMERICAS

THE 109th MEETING OF THE EXECUTIVE COMMITTEE,

Having considered and examined the progress report presented by the Director (Document CE109/13 and ADD. I),

RESOLVES:

To recommend to the XXXVI Meeting of the Directing Council the adoption of a resolution along the following lines:

THE XXXVI MEETING OF THE DIRECTING COUNCIL,

Having considered and examined the progress report presented by the Director (Document CD36/13) on the implementation of the Expanded Program on Immunization and the Plan of Action for the Eradication of Wild Poliovirus from the Americas;

Noting with great pride that:

- *Transmission of wild poliovirus appears to have been interrupted or is on the verge of being interrupted, with only nine cases being reported in 1991 and no cases in the past 12 months;*

- *Major advances have been made in the efforts to eliminate neonatal tetanus;*

- *Several countries have given high priority to the control of measles;*

- *Considerable effort has been made to ensure that the Region is self-sufficient in terms of vaccine production and quality control;*

- *Immunization coverage levels have been maintained and even increased in most countries, reaching an all-time high of over 75% for all the vaccines being used (DPT, polio, measles and BCG and TT);*

- *New initiatives have been started, such as a better understanding of pertussis epidemiology in the Americas, a search for strategies for controlling hepatitis B and rubella, and the possibility of introduction of new vaccines in national immunization programs, such as against Haemophilus influenzae type B; and*

Recognizing that as the program reaches this high level of performance, it also represents the beginning of a very challenging period, namely the consolidation of poliomyelitis eradication, elimination of neonatal tetanus, control of measles, and further increase of immunization coverage, and that the possibility of inclusion of new vaccines in the national programs poses a major challenge, both in terms of strategies and of resource allocation in already strained national health budgets,

RESOLVES:

1. To congratulate all Member Governments and all concerned, particularly the health workers, for their continuing commitment and efforts, sometimes under the most difficult circumstances.

2. To recognize the continued support from the agencies involved in this effort (AID, UNICEF, IDB, Rotary International, CPHA, and PAHO) and to call on them to maintain and increase their contributions to the program, particularly in this critical phase of consolidation of gains and starting of a new phase.

3. To urge all Member Governments to maintain the priority accorded to this program and its goals and to assign the necessary human and financial resources to implement the actions outlined in the progress report, especially the ones described in Chapter II, of Document CD36/13; for these purposes it is necessary that:

a) Resources both human and financial, including those required for the purchase of vaccines, be available in national health budgets and be allocated to the areas at highest risk for disease transmission and of low immunization coverage;

b) Specimens for poliovirus diagnosis from all patients with acute flaccid paralysis and their contacts be collected at appropriate times and examined in the laboratory network, to ascertain that no wild virus is circulating in the Region;

c) Following the schedule outlined in the progress report, countries appoint national certification commissions to start collecting and analyzing the data eventually needed for certification of the interruption of transmission of wild poliovirus;

d) Priority be given to vaccination of women of child-bearing age in the areas identified as at risk for the disease, with involvement of the traditional birth attendants, and that cases of neonatal tetanus be reported separately from postnatal tetanus;

e) In the efforts to control or eliminate measles, all countries assure that surveillance is properly implemented;

f) Strategies to include other vaccines, such as hepatitis B, rubella or haemophilus influenza B, be carefully considered, particularly in relation to the epidemiological situation and resource availability; and

g) All vaccines used in the program comply with the minimum requirements of PAHO/WHO.

4. To request the Director to:

a) Maintain the high priority accorded to this program and to the actions needed to consolidate the eradication of poliomyelitis and the efforts to control or eliminate other vaccine preventable diseases;

b) Start implementation of a plan for the certification of eradication of poliomyelitis from the Americas;

c) Give strong support to the search for additional resources for measles elimination initiatives under way in several countries of the Region and assess the feasibility of the elimination of measles throughout the Hemisphere;

d) Utilize the incidence of neonatal tetanus as an indicator of the performance of maternal and child health services, particularly in areas at risk.

(Adopted at the eighth plenary session, 25 June 1992)

Annexes

executive committee of the directing council

PAN AMERICAN HEALTH ORGANIZATION

working party of the regional committee

WORLD HEALTH ORGANIZATION

109th Meeting
Washington, D.C.
June 1992

CD36/13 (Eng.)
ANNEX I

Provisional Agenda Item 4.6

CE109/13 (Eng.)
27 April 1992
ORIGINAL: ENGLISH

PLAN OF ACTION FOR THE ERADICATION OF INDIGENOUS TRANSMISSION OF WILD POLIOVIRUS FROM THE AMERICAS

This progress report is presented by the Director to the 109th Meeting of the Executive Committee in response to Resolution X of the XXIII Pan American Sanitary Conference (September 1990) and Resolution IX of the XXXV Meeting of the Directing Council (September 1991).

The progress report presents the latest developments at the country and regional levels in regards to the efforts to eradicate poliomyelitis from the Western Hemisphere, as well as those directed towards the control or elimination of other diseases preventable by vaccination. The report presents the highlights of the X Meeting of the EPI Technical Advisory Group (TAG), which was held in Rio de Janeiro, Brazil, 16-19 March 1992, in conjunction with the II Meeting of the International Certification Commission of Poliomyelitis Eradication in the Americas (ICCPE). The tremendous progress made by all countries in terms of immunization coverage, which reached record levels in 1991, and the impact in overall disease reduction were recognized. Available data suggest that poliovirus transmission in the Region of the Americas may have been interrupted or, at the very least, be rapidly approaching that point. Considerable advances have been made in the efforts to eliminate neonatal tetanus and to control measles and countries have started looking at new initiatives, such as the pertussis situation in the Region, hepatitis B and rubella control, as well as the possibility of inclusion of new vaccines such as Haemophilus influenzae B. The report points out that as the immunization programs mature, the issue of vaccine production and quality control becomes critical and it will be necessary to approach this aspect of the immunization program with a regional strategy.

The report discusses in detail all the problems that are still ahead before the Region can be free of poliomyelitis, and those actions that are necessary to achieve this goal. Also presented are the actions related to the control of other vaccine-preventable diseases in order that the full potential of this most cost-effective public health intervention can be fully realized in the Region of the Americas. The full participation of, and coordination between, governments and those agencies that are supporting the program becomes critical at this juncture, especially the allocation of both human and financial resources by Member Countries in areas still at high risk of disease transmission because of low immunization coverage.

The Executive Committee is requested to review the current status of regional efforts to eradicate the transmission of wild poliovirus, as well as the efforts to control other vaccine-preventable diseases in the context of the EPI.

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PLAN OF ACTION FOR THE ERADICATION OF INDIGENOUS TRANSMISSION OF WILD POLIOVIRUS FROM THE AMERICAS

I. PROGRESS TO DATE

The Technical Advisory Group (TAG) of the Expanded Program on Imunization (EPI) of the The Pan American Health Organization held its X Meeting in Rio de Janeiro, Brazil, from 16-19 March 1992. Participants from 23 countries of the Americas attended the meeting. The International Certification Commission on Poliomyelitis Eradication in the Americas (ICCPE) held its II Meeting in conjunction with the TAG Meeting. An in depth review of each country immunization program was undertaken during these meetings and all the actions at country and international levels that are necessary to implement to achieve the targets of the program were discussed. What follows in this Progress Report by the Director highlights the major conclusions and recommendations of these two Advisory groups.

1. Immunization Coverage

The countries of the Americas continued their efforts to sustain and increase immunization coverage. The provisional data for 1991 indicates that once again the Region surpassed the coverage levels of the previous year. For 1991, coverage surpassed the level of 75% for all the vaccines included in the program, DPT 75%, OPV 89%, Measles 80% and BCG 81%, as can be seen in Figure 1. This high level of coverage is observed in most countries of the Region, as can be seen in Table 1.

Immunization coverage is now monitored at the district or municipality level. This information provides program managers the possibility of identification of those areas at highest risk allowing for the allocation or re-distribution of resources to those districts or municipalities that require additional help. This immunization information system can serve as the embryo for the development of a more comprehensive health information system for local health systems. As of 1991, there were nearly 60% of 5308 districts or municipalities in which the coverage levels were over 80% for OPV vaccine, for example, and still 20% in which coverage was below 50% (Figure 2). Major efforts should now be made to increase coverage in these low coverage areas.

For the first time some countries have provided PAHO with vaccination coverage data with Tetanus Toxoid (TT) in women of child-bearing age. This data is particularly important when analyzed according to the neonatal tetanus high risk areas.

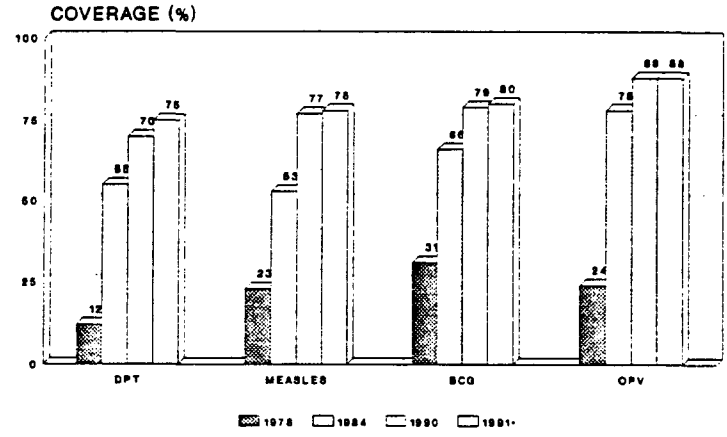
Table 1
Vaccine Coverage in Children Under One Year of Age in the Region of the Americas 1990-1991

SUBREGION/COUNTRY	CHILDREN UNDER 1 YEAR OF AGE 1990	1991	DPT 1990	1991	OPV 1990	1991	MEASLES 1990	1991	BCG 1990	1991
ANDEAN REGION	2,363,278	2,413,690	71	71	76	77	67	68	82	83
BOLIVIA	221,956	218,874	41	58	50	67	53	73	48	67
COLOMBIA	685,108	770,593	87	87	93	94	82	82	95	93
ECUADOR	320,852	327,138	68	59	67	62	61	54	88	83
PERU	600,904	603,700	72	71	73	74	64	59	82	78
VENEZUELA	534,458	493,533	63	60	72	71	62	61	73	79
BRAZIL	3,932,546	4,020,070	65	80	95	96	78	83	79	75
CENTRAL AMERICA	1,016,133	1,022,522	75	73	81	76	79	63	71	68
BELIZE	6,734	7,125	90	82	85	82	85	76	86	79
COSTA RICA	82,500	80,296	95	90	95	89	90	96	92	81
EL SALVADOR	186,266	190,636	77	60	77	60	76	53	60	66
GUATEMALA	349,847	346,092	66	63	74	69	68	49	62	43
HONDURAS	180,721	184,450	84	94	87	93	90	86	72	100
NICARAGUA	148,085	151,095	66	71	87	83	82	54	84	75
PANAMA	61,980	62,625	85	82	84	82	98	80	100	87
ENGLISH CARIBBEAN	132,747	130,848	86	85	86	84	75	83	94	92
ANGUILLA	200	154	100	100	100	100	100	100	100	100
ANTIGUA	1,114	1,262	100	94	100	97	89	87	100	-
BAHAMAS	5,641	6,000	86	92	82	91	91	93	87	-
BARBADOS	4,040	4,310	91	82	90	84	87	92	95	-
CAYMAN ISLANDS	434	434	95	97	95	96	82	90	90	81
DOMINICA	1,715	1,619	92	98	94	94	88	98	99	99
GRENADA	2,650	2,585	80	85	69	82	85	96	-	-
GUYANA	18,500	17,000	83	81	79	81	73	76	85	89
JAMAICA	59,104	59,606	86	85	87	86	74	77	98	94
MONTSERRAT	154	173	100	100	100	100	100	100	100	100
ST. KITTS & NEVIS	980	976	100	100	100	100	100	100	-	-
ST. LUCIA	3,652	3,652	91	96	90	95	82	97	97	-
ST. VINCENT	2,505	2,457	98	99	92	99	96	100	100	100
SURINAME	9,000	9,000	83	75	81	72	65	84	-	-
TRINIDAD & TOB.	20,980	20,980	83	82	87	81	71	93	-	-
TURKS & CAICOS	300	290	97	100	90	100	81	100	100	100
BRITISH VIR. ISL	238	350	100	98	100	95	100	84	100	90
LATIN CARIBBEAN	616,556	400,601	67	70	74	79	73	83	62	68
CUBA	186,654	173,896	92	100	94	97	94	100	98	98
DOMINICAN REPUB.	222,265	226,705	69	47	90	64	96	69	23	44
HAITI	207,637	-	41	-	40	-	31	-	72	-
MEXICO	1,600,550	1,933,394	66	63	96	95	78	-	70	87
NORTH AMERICA	883	883	62	82	62	82	63	66	-	-
BERMUDA	883	883	62	82	62	82	63	84	-	-
CANADA	-	-	-	-	-	-	-	-	-	-
USA	-	-	-	-	-	-	-	-	-	-
SOUTHERN CONE	1,184,445	1,125,803	88	85	89	88	90	95	97	97
ARGENTINA	686,289	676,061	87	84	90	88	93	100	100	100
CHILE	303,340	308,019	95	91	95	91	93	93	94	90
PARAGUAY	138,802	141,723	79	79	76	79	70	73	90	93
URUGUAY	56,014	-	88	-	88	-	82	-	99	-
TOTAL	10,847,138	11,047,811	70	75	88	89	77	79	79	81

- NO DATA AVAILABLE

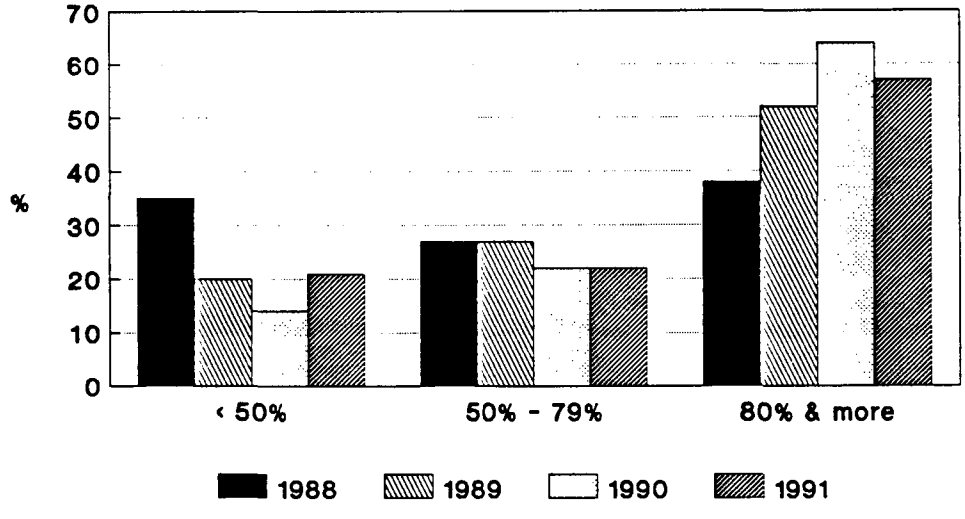
SOURCE: COUNTRY REPORTS TO P.A.H.O.

Figure 1
Vaccination Coverage in Children Under One Year
of Age in the Region of the Americas, 1978, 1984, 1990 and 1991*



Source: Country data
* Provisional data

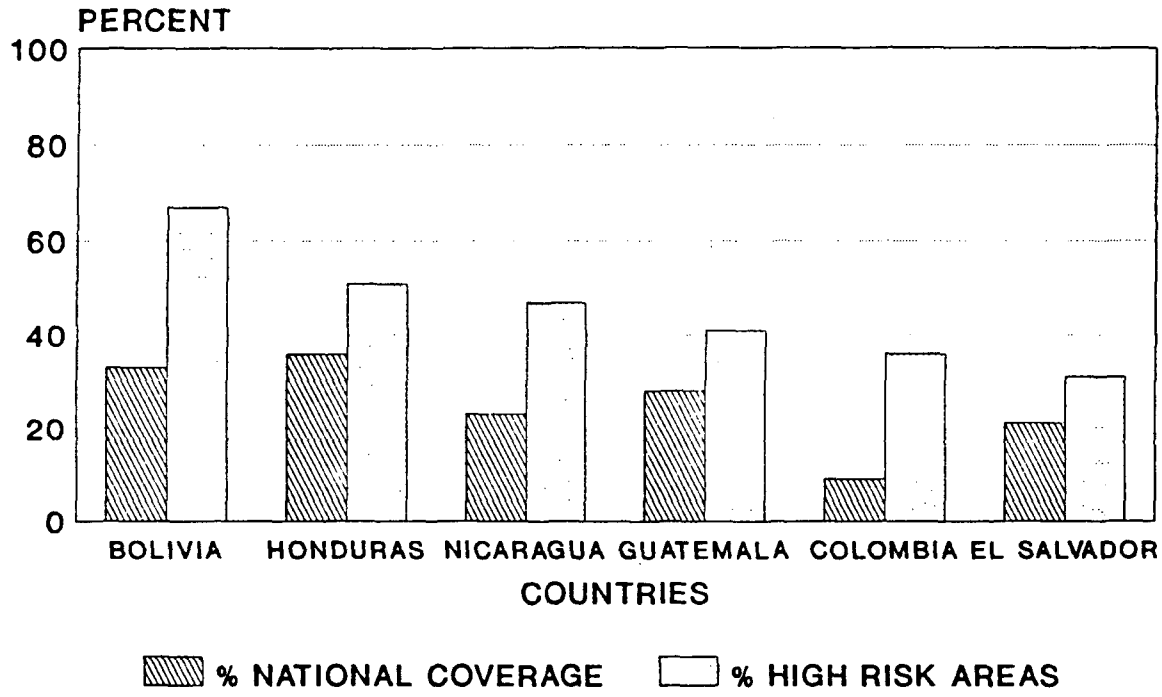
Figure 2
Distribution of Districts by Range of OPV3 Coverage in
Children < 1 Year in Latin America, 1988 - 1991



Number of Reporting districts:
1988, 5791; 1989, 9691; 1990, 8731; 1991
Source: PAHO (First semester 1991 data)

As can be seen in Figure 3, the proportion of women of child-bearing age that received at least two doses of TT, when compared with national averages, demonstrates that countries are giving priority to those areas in which the majority of cases are occurring, which in turn will increase the impact of the intervention in terms of cases prevented.

Figure 3
TT2 Coverage in High-Risk Areas of Selected Countries in the Americas 1990 - 1991



SOURCE: PAHO

2. Interruption of Wild Poliovirus Transmission

Available data suggest that poliovirus transmission in the Region of the Americas may have been interrupted or is, at the very least, rapidly approaching that point. Despite investigation of more than 4000 stool specimens, in 1991 wild poliovirus transmission was documented in only two countries: Colombia and Peru. In 1991, only nine confirmed cases were detected in the Region, eight in Colombia and one in Peru. The last confirmed case had onset in August 1991 in Junin, Peru (See Map 1).

More than five years have elapsed since the last wild poliovirus was isolated in the countries of the Southern Cone; more than 10 years since an indigenous case was detected in the United States or Canada; more than nine years since an isolate was reported from the English-speaking Caribbean; more than 30 years from Cuba, more than four years since the last isolation of indigenous wild poliovirus in Central America (three isolates in 1990 are thought to have been imported from Mexico); three years in Brazil; and more than a year in Mexico.

Map I
Confirmed Cases of Polio
Region of the Americas, 1991

LAST DATES OF ONSET:

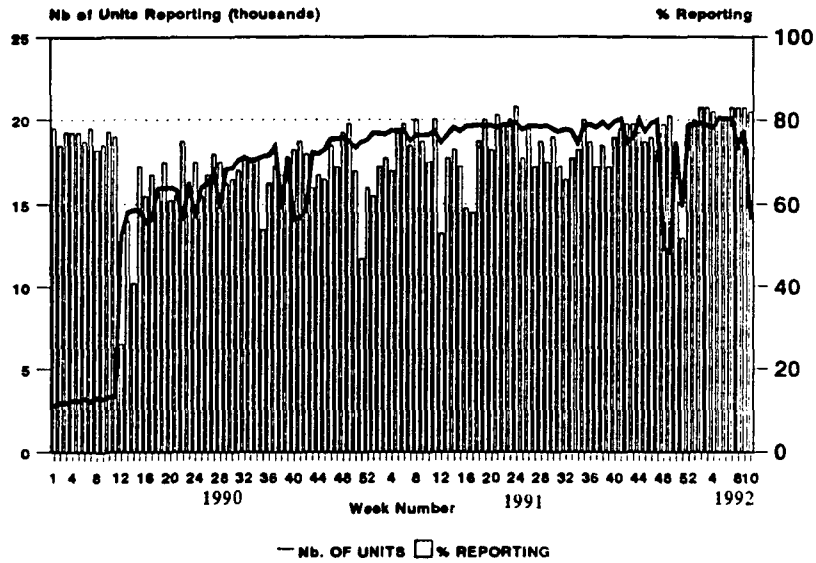
Colombia: 24 May 1991
Peru: 23 August 1991

It is recognized that this tremendous progress would not have been possible without the high level of commitment accorded to immunization programs by all countries of the Americas, by PAHO, and by the collaborating national and international organizations such as UNICEF, USAID, Rotary International, IDB, and CPHA. These efforts have also been dependent upon the high level of coordination achieved between all governments and the agencies supporting the program (USAID, UNICEF, ROTARY, IDB, CPHA, and PAHO). National Immunization Days and Mop-up Operations to complement routine immunization services require a large measure of political and social commitment, but they have been primarily responsible for interrupting wild poliovirus transmission in the Americas. As the EPI embarks upon special programs for neonatal tetanus and measles, the program now more than ever will rely on the continued support of all contributors. This will be essential to continue to progress to higher levels of achievement and to insure that what has already been gained, particularly polio eradication and the reinforcement of national health infrastructures, is not jeopardized or lost.

Great improvement is noted on the surveillance performance indicators. The network of weekly reporting units incorporates nearly 20,000 health units, covering all districts or municipalities in the various countries (Figure 4). As shown in Figure 4, 80% of these units report weekly on the presence or absence of cases of acute flaccid paralysis (AFP). The network is now being used to report other vaccine-preventable diseases and in some countries, cholera cases. This fact, coupled with the existence of a network of laboratories that are well equipped and that utilize the most advanced technologies for enterovirus diagnosis, such as DNA probe technology and polymerase chain reaction (PCR), demonstrates that the initiative to eradicate poliomyelitis has strengthened the overall health infrastructure.

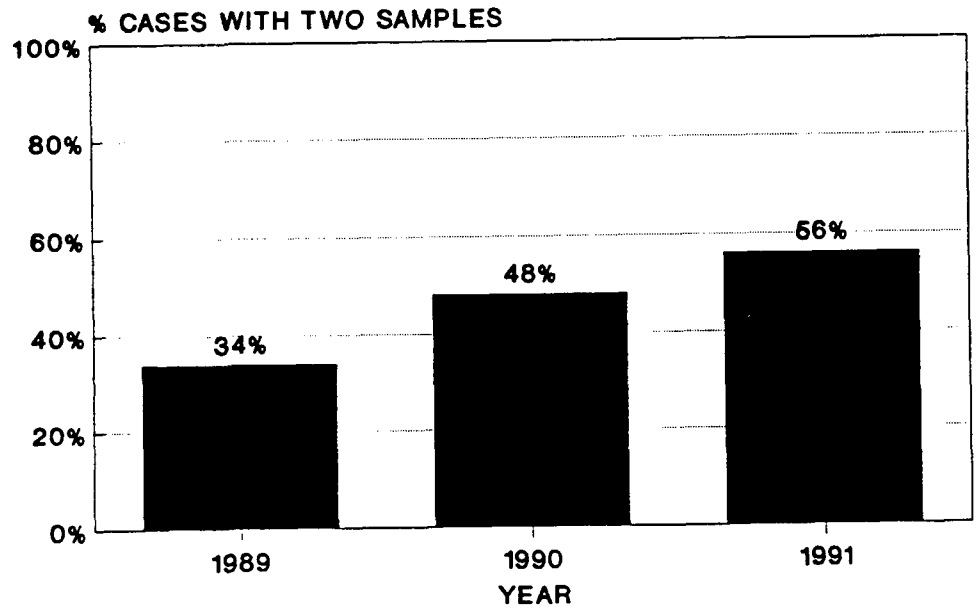
In spite of progress in the last three years, the principal deficit now is assuring the proper collection of two adequate stool specimens within 15 days of onset of paralysis from every case of acute flaccid paralysis (See Figure 5) and from contacts. Without this information, a case remains as a "compatible" case and uncertainty remains as to whether poliovirus transmission has been stopped. During the coming months, the highest priority must be given to the detection and thorough investigation of all cases of AFP, especially those which are compatible with polio and particularly those with acute febrile onset in children less than six years old.

Figure 4
Negative Reporting of AFP
Latin America, 1990-1992*



* To week 10, 1992
Source: PAHO

Figure 5
Proportion of AFP Cases With Two Adequate Stool Samples Taken
Region of the Americas, 1989 - 1991



SOURCE: PESS/PAHO

To supplement, not replace, the emphasis of adequate and timely stool collection from every case of AFP, confirmation of cases through contact investigations cannot be neglected. Between 1989-1991, 12% of all confirmed cases reported were so identified by isolation of wild poliovirus from stools of contacts at a time when the stools of the index cases were negative. Despite the importance of contact investigations and specimens, only 43% of all cases of reported AFP in 1991 had contact investigations and only 16% had five or more contacts. Once laboratory investigations of contact stools are initiated, the work must continue until a final result is obtained. Of special concern are those polioviruses from stools of contacts which are still pending characterization even though some are classified as compatible polio cases.

Renewed emphasis needs to be placed on maintaining and improving the quality of surveillance to spear-head the program into the "certification era" and on documenting activities. Because the PAHO Polio Eradication Surveillance System (PESS) will serve as the most important instrument for data analysis during the certification process, special efforts are needed to ensure that all the necessary epidemiological, clinical and laboratory information is entered into PESS.

Community sampling and testing of sewage appears promising and such work should be expanded into other countries using a targeted risk approach. In areas, particularly rural areas, where conditions do not allow sampling and testing of sewage, community stool surveys of children will need to be done. These surveys will need to be carefully planned and coordinated on a Regional basis to assure that surveys are performed in the most appropriate areas and that laboratory capacity is not exceeded.

The intensive efforts made in Colombia and Peru to eliminate transmission of wild poliovirus appear to be progressing well, but special alert measures will be required for the balance of the year. These extraordinary efforts have demonstrated once again the high level of commitment the immunization program places on the integration of primary health care services.

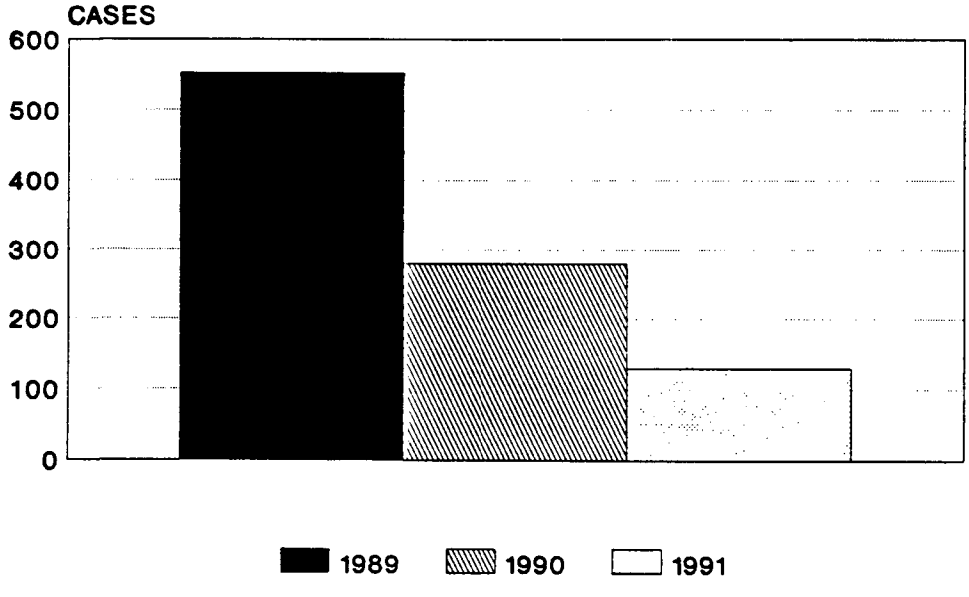
Last year the Americas were confronted with the largest cholera epidemic reported this century. Over 400,000 cases of cholera have been reported in the Americas since the start of the epidemic in Peru in January 1991, and its spread to Ecuador, Colombia, and other countries. In both Colombia and Peru, mop-up campaigns to eradicate polio (called "sanitary mop-ups") incorporated cholera prevention activities, including the dissemination of health education materials to prevent further spread. Other countries not reporting confirmed polio cases will direct special attention to cholera prevention, especially during house-to-house mop-up campaigns.

It is also recognized that significant contributions have been made by the social mobilization efforts undertaken in support of immunization programs. However, more resources are required for all aspects of social mobilization, especially mass media communications, in order to inform and educate the population about the importance of immunization in avoiding needless death and disability. This is especially important for disadvantaged populations, which are always the most difficult to reach and yet need to be informed about immunization in general, about specific vaccinations, appropriate ages for each vaccine, number of doses, and other factors. Past efforts utilizing the mass media and well-known artists or personalities have had a positive effect on coverage rates in national and regional campaigns. This was exemplified in the Andean Region for Andean Immunization Day, and in the Caribbean Region for Measles Immunization Month.

3. Neonatal Tetanus Elimination

The impact of the measures being implemented in those areas at high risk for neonatal tetanus (NNT) can already be seen when the incidence of NNT is analyzed in those districts that were identified as being at high risk in 1988 and 1989. Figure 6 compares the incidence of NNT in those districts in 1991 compared with 1989, and an 80% reduction in the number of cases for the period under consideration is noted.

Figure 6
Neonatal Tetanus Incidence in 478 High-Risk Districts
Region of the Americas 1989 - 1991



SOURCE: PAHO

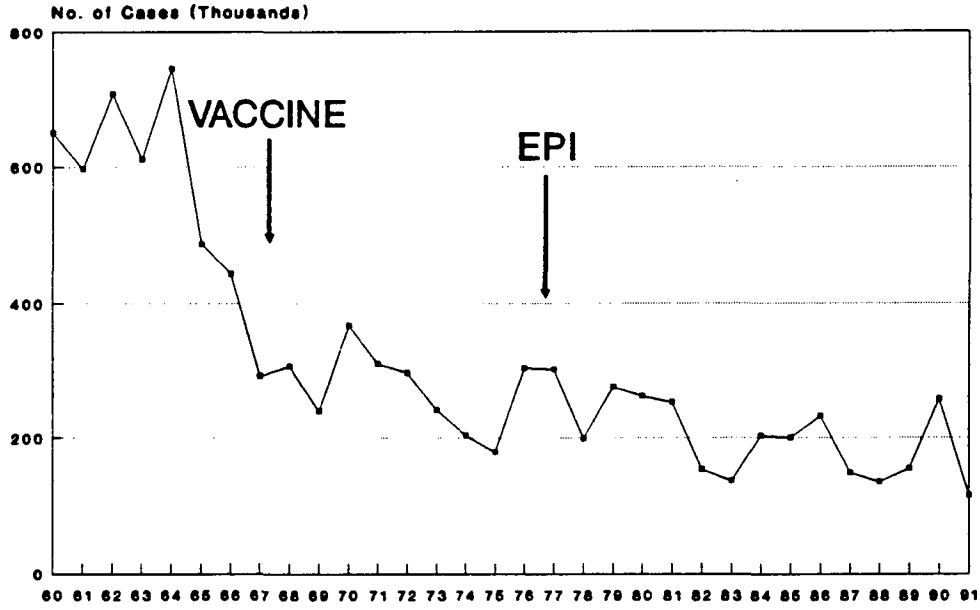
In 1991 there were 898 reported cases of NNT of which 780 (87%) were investigated. This was a great improvement over 1990 when only 446 (35%) of the total cases were investigated. Of the 780 cases investigated in 1991, the vaccine history was obtained from 311 mothers: only 19 had received 2 or more doses of tetanus toxoid.

To reach the elimination target for the Region, it will be necessary to vaccinate approximately 20 million women of child bearing age (22% of the women in endemic countries) who live in 1,140 municipalities (10% of the total municipalities in endemic countries).

4. Measles Control

Overall incidence of measles in the Americas continues to diminish and the pattern of outbreaks occurring shows tendencies toward longer interepidemic intervals (Figure 7).

Figure 7
Reported Cases of Measles
Region of the Americas, 1960 - 1991*



SOURCE: PAHO
• 1991 DATA IS PROVISIONAL

In order to be able to get a better picture of the changes in measles epidemiology and to adjust control activities, priority should be given to obtaining minimal surveillance information (age, date of onset, vaccination status, date of vaccination) for all measles cases, particularly during outbreaks.

The recent initiative of elimination of measles in the English Caribbean region appears to have been successful in interrupting measles transmission in some countries which have followed the measles month-long mass vaccination strategy. The Caribbean initiative was based on the Cuban experience with a "one-shot" mass campaign aimed at all children 1-14 years old, followed by maintenance of high levels of immunization in the new cohorts of one-year olds and aggressive surveillance to detect new cases and apply control measures. Similar strategies have been adopted by the Central American countries, in which the Presidential Summit held in Honduras in December 1991 passed a resolution to eliminate measles from Central America by 1997. Likewise, Brazil and Chile initiated in April 1992 major campaigns aimed at the elimination of measles, molded in the strategies implemented by Cuba and the English-speaking Caribbean. It is believed that the experience gained from this initiative and others to be developed should be used to learn about the process and problems of measles elimination, to reinforce measles vaccination and control efforts, to strengthen surveillance systems, and to address issues of sustainability. To review the issues and set the path for PAHO technical cooperation in this activity, the Director convened a group of experts to review the measles initiatives currently under way or being planned in several countries. The group met in Washington, D.C. on 28 February 1992. The conclusions and recommendations of the Group are described in section II.4.

5. Vaccine Production and Quality Control

The great increase in demand for vaccines in recent years in the Region, resulting from intensified implementation of vaccination programs, has brought problems related to the continuous supply of vaccines needed for these programs. Globally, developing countries are responsible for an increasing demand for vaccines. In consequence, the prices of vaccines are likely to rise in the world market; indications of this have been detected by the UNICEF vaccine bid and the PAHO Revolving Fund.

At the same time, the developments in basic sciences and technologies related to biologicals has opened the prospect of making existing vaccines safer, more thermostable, more potent, and more effective; making new formulations and combinations of existing antigens; and developing entirely new vaccines. The Children's Vaccine Initiative

launched by WHO, UNICEF, UNDP, the World Bank, and the Rockefeller Foundation at the time of the Children's Summit in September 1990 defined the ideal vaccine as one which is safe, effective, thermostable, containing in one dose all the antigens required to fully protect a child against all preventable diseases, and preferably administered orally.

In the Region of the Americas there are several research institutions and several important groups of scientists involved in basic biological research. There are also institutions with long traditions in the development and production of biologicals which are playing an important role in supplying biologicals required in the Region, including vaccines for national immunization programs. In addition to EPI vaccines, the Region is self-sufficient in rabies vaccine produced in newborn mice (either for human or canine use) and yellow fever vaccine.

To make it possible for the Region to participate more fully in the process of improving vaccines or developing new ones, PAHO has taken the steps to initate a Regional Vaccine System (Spanish acronym "SIREVA": Sistema Regional de Vacunas), which encompasses all phases related to the development of vaccines (epidemiological surveillance, research, clinical and field trials, scale-up of production procedures, quality control and quality assurance). The full implementation of SIREVA should strengthen existing research groups and institutions in the Region and ultimately enable them to operate by themselves.

SIREVA has been discussed in several meetings and has been found to be feasible economically, scientifically, and technologically. Existing PAHO mechanisms would carry out the coordination activities essential for technical cooperation among the institutions and to facilitate related matters such as technology transfer.

There are already some important activities under way under the aegis of SIREVA, including oral cholera vaccine field trials in Colombia, Brazil, and Mexico; strengthening of surveillance and laboratory activities in studies of the prevalence of S. pneumoniae in the Region; and improvement of production procedures through workshops on Good Manufacturing Procedures (GMP). In addition, the organization of a network of quality control and quality assurance laboratories is being discussed and workshops on quality control methodologies are under way. CIDA, IDRC, the Rockefeller Foundation, the Inter-American Development Bank, the Government of Mexico and PAHO itself have provided the funding which has been available to date.

II. PRIORITIES FOR ACTION

1. Immunization Coverage

Major efforts will be needed to further increase immunization coverage in most countries. The strategies that proved so successful to date should be continued and strengthened. Immunization should be offered at every contact of the child or women of child-bearing age with the health service system, and missed opportunities should be eliminated. National vaccination campaigns should be continued in those countries which still are at risk of poliovirus transmission or in which the health services infrastructure does not cover all the population. The strategies should be particularly strengthened in those municipalities or districts that are identified with the lowest coverage and necessary resources should be allocated in order that coverage can be increased. Member Governments should assure that vaccines are available at all times, in order to prevent that children do not get vaccinated because of lack of vaccines as observed in a few countries in the past.

2. Poliomyelitis Eradication

2.1 Vaccination, Vaccines, and Cold Chain

- It will be critical to maintain high vaccination coverage uniformly with oral polio vaccine (OPV) in order to assure that pockets of susceptibles are reduced to a minimum and to prevent dissemination of wild poliovirus in the event of an importation.

- OPV remains the vaccine of choice for the eradication program in the Americas, as it is for eradication programs in other parts of the world. Data from the experience in the Americas indicate that to achieve eradication of the wild poliovirus this vaccine must be given in mass campaigns. Inactivated polio vaccine (IPV) does not induce intestinal immunity of a degree that stops further spread of the virus and is not recommended for national use in the Americas.

- The quality control of vaccines continues to be of vital importance. As has been recommended in previous TAGs, all countries producing vaccines should have batches of their vaccines tested regularly in the PAHO/WHO reference laboratories.

- Special efforts continue to be needed to improve and maintain the quality of the cold chain both for vaccines and for transportation of stool specimens. Management and follow up of the cold chain indicators needs added emphasis, particularly in the Andean countries where the last areas of transmission occurred.

2.2 Specimens

- The laboratory network is functioning smoothly. Nonetheless, efforts should be undertaken to reduce to a minimum the turnaround time for reporting results, including molecular characterization.

- Specimen collection from both cases of AFP and their contacts remains the best way to rule out wild poliovirus transmission. Every case of AFP needs two adequate stools collected within 15 days of onset of paralysis and specimens from at least five contacts under five years of age. Because it is impossible to determine whether a patient will be available at follow-up, specimen collection must take place during the first encounter with the patient.

- The decision to test stools of contacts requires a high level of communication and coordination between the epidemiologists and the virologists. For all compatible cases, all available specimens from cases and contacts should be examined. To ensure that there are no delays in the investigation of contacts, the epidemiologist should be in contact weekly with the virologist to discuss problems or issues raised by reports from PAHO's Weekly Bulletin and the investigation or follow-up of cases of AFP and their contacts.

- Inadequate collection of stool specimens accounts for the large number of compatible cases reported during the last two years: 71 cases in 1990 and 33 in 1991. The occurrence of compatible cases, particularly in children who are less than 6 years of age who had fever at onset of paralysis demands the highest priority in attention. Even one such case, inadequately investigated, could set back the date of eligibility for certification.

2.3 Reporting and Maintenance of Data

- The collection and evaluation of the appropriate clinical information is critical for justifying "discarding" cases. TAG recognizes that a single, standardized information system, available at the national and Regional levels of the program, will be critical for ensuring that polio eradication has been achieved and for facilitating the certification process. Accordingly, it is recommended that only data available in PESS be used for the certification process. This will require that countries place added emphasis on the complete collection of clinical information from cases of AFP and that these data be entered into PESS.

2.4 Community Surveillance of Wild Poliovirus

- The results of pilot studies conducted last year, particularly during the last outbreak in Cartagena, Colombia, where wild-type 1 poliovirus was isolated from both the stools of surveyed children and from sewage, demonstrate the usefulness of environmental surveillance of wild poliovirus. Such studies should be continued using a targeted risk approach. As pointed out, such surveys need to be Regionally planned and coordinated to assure that laboratory capacity is not overwhelmed.

- With the advent of environmental surveillance, the laboratory network will be confronted with a dramatic increase in the number of stool specimens collected from sewage and surveys of children. Pooling of specimens will be necessary for the labs to handle this increased work-load. Studies should be done to determine optimal methods. Special antibody capture techniques as used for hepatitis A, cefadex columns, and organic compounds such as freon may be appropriate and should be evaluated. Once PCR technology has been transferred, these concerns will lessen.

- Sewage collection methodologies should be continued to be evaluated. Currently, the simple gauze pad collection method appears most promising.

- Studies that would lead to reliable direct application of polymerase chain reaction to raw sewage samples should be encouraged, thereby minimizing the need for virus culture and the delayed reporting of results.

2.5 Certification Process

The ICCPE considered issues relating to certification of eradication. It was agreed that a plan should be developed by PAHO which would outline the steps necessary for a country (or sub-region) to prepare for certification. It is anticipated that this plan will be presented to the ICCPE for discussion and approval in early autumn 1992 and subsequently distributed to Member Countries.

Although specific details remain to be worked out, the certification process will focus on evidence in three main areas: immunization coverage, surveillance of illness (acute flaccid paralysis), and surveillance of poliovirus. Formal certification will not occur until at least three years have passed since onset of the last case of paralysis due

to wild poliovirus anywhere in the hemisphere. Provisional certification may be granted to sub-regions within the Americas before hemispheric eradication is certified. Countries in which no cases have been reported in recent years may wish to consider establishment of national commissions to aid in the review process.

Some of the issues that will be addressed in reviewing evidence will include maintenance of immunization levels in each district; distribution and functioning of surveillance sites; frequency of notification (including negative reporting); indices of investigation (including rapidity of investigations, adequate collection of stool specimens from the patient and contacts, and results of laboratory studies on these specimens); and results of community sampling (both sewage sampling and stool surveys).

2.6 Global Program

It is critical that other Regions intensify their efforts for global polio eradication in order to protect their own populations as well as reduce the risk of importation of wild poliovirus into the Americas.

3. Neonatal Tetanus (NNT) Elimination

The following are actions that need to be implemented immediately:

- Separate reporting of neonatal and postnatal tetanus.
- Investigation of each case of NNT and implementation of active searches.
- Prioritization of vaccination activities in women of child-bearing age in high risk areas.
- Involvement of traditional birth attendants in the surveillance and control activities.

It is necessary to improve the quality of the data collection system for all neonatal patients that attend health services in high risk areas, to make them useful in the control and investigation of individual cases of neonatal tetanus.

All endemic countries should report coverage rates specifically for women of child-bearing age.

4. Measles Control

The following were the conclusions and recommendations of the meeting of experts convened by the Director in February 1992:

"1) The Group recognized that PAHO has historically played a lead role in the control of vaccine preventable diseases. It was the first continent to become free of smallpox; it developed several strategies that led to greatly improved immunization programs, such as the institution of a revolving fund for vaccine purchase. It was also the first Region to prioritize the development of surveil-lance within national immunization programs. PAHO was also the first Region to decide on poliomyelitis eradication and the strategies now being applied globally were developed in the Region of the Americas. In this context, PAHO's efforts to enhance measles control, possibly leading to global eradication, would be yet another 'first'.

"2) The Group emphasized the fact that of all known microorganisms, the measles virus is the most serious, resulting in more deaths than any other. Measles vaccination programs thus command the highest priority. Measles causes a substantial health burden in both developed and developing countries. Not surprisingly, data from recent studies of the cost effectiveness of health interventions (unpublished World Bank list) shows measles vaccination to be the most cost effective medical procedure in terms of adding discounted healthy life years (DHLY). It was shown to be more effective than interventions such as neonatal care, vaccination against other vaccine-preventable diseases, and other child health interventions such as oral rehydration therapy and antibiotic therapy for acute respiratory infections.

"3) Given the fact that man is the only host for the measles virus, that the illness is short-term and followed by permanent immunity and that a highly protective (over 90% efficacious) vaccine is available, the Group agreed that interruption of measles transmission is theoretically possible and has been achieved in some areas for limited periods. However, this has never been done over a wide geographical area. Thus, there is utility in determining the practicability of achieving this objective in selected areas and countries. Such initiatives would help to address several important questions such as:

a. What are the best approaches for measles surveillance, in terms of clinical case definition, reporting sources, follow-up and laboratory diagnosis utilizing a single blood specimen;

b. What levels of immunity are necessary to achieve interruption of transmission in different urban and rural environments;

c. What is the best vaccine and vaccination schedule and vaccine delivery strategy to stop transmission (mass campaigns, routine immunization, combined approach) vis-a-vis the changing epidemiology of the disease;

d. Due to the highly contagious nature of the disease, how can a 'transmission free' status be sustained once the disease is reintroduced into a given population and what is the best strategy to control outbreaks;

e. What are the management constraints, financial as well as operational, including issues that deal with vaccine supply.

"4) The Group considers that these efforts to enhance the control of measles with actions that are designed to lead towards its elimination should be supported by PAHO. It therefore recommends that PAHO give support to the initiatives al-ready under way in Cuba and the English-speaking Caribbean and those already planned in Brazil, Chile and the Central American countries, as they represent valuable steps towards assessing the feasibility of elimination of measles throughout the Western Hemisphere.

"5) These initiatives should be pursued within the context of the overall PAHO policies of strengthening of the health infrastructure and the decentralization of services. The impact on measles morbidity and mortality should serve as a surrogate to the performance of the immunization program as a whole.

"6) As lessons are learned and barriers are further identified and removed, PAHO should continuously reassess the feasibility and timing of an elimination goal for the Western Hemisphere."

5. Vaccine Production and Quality Control

- The coordinated effort of SIREVA should be supported in order to make it possible for the Region to participate fully in the development of new or improved vaccines.

- Strong support should be developed to improve the production capabilities of existing vaccine production facilities in the Region.

- Existing technical requirements for quality control and assurance should be enforced

in all production facilities and a system of vaccine quality surveillance should be enforced through a regional network in order to assure the quality of vaccines being used.

- Technical cooperation among laboratories in the Region should be strengthened to enhance existing capabilities.

6. Inter-Agency Coordination and Financial Issues

It will be necessary that governments ensure that there are enough resources available in the national health budgets to address the needs of the immunization program, particularly those that are necessary for the purchase of vaccines, syringes and needles and other critical program inputs. It is also of paramount importance that the available resources be targeted proportionally to the areas at highest risk of disease occurrence and low levels of coverage.

Inter-Agency coordination should continue to play a critical role in the implementation of this program. It is therefore of paramount importance that the following actions, which were recommended by the Interagency Coordinating Committee (ICC) meeting held 12 December 1991 in Washington, D.C. be implemented by all concerned:

"1) In each country the ICC should meet regularly to review and plan with their national counterparts the implementation of activities listed in the Plan of Action.

"2) In each country, the ICC should improve its methodology for monitoring budget execution and disbursements (both by governments and collaborating agencies) and reflect any budgetary changes by updating the Plan of Action at regular intervals. To assist ICC, it is recommended that a simple monitoring form should be used in conjunction with the budget planning regular format.

"3) Resources flowing from the National Plans of Action should be targeted to the high risk areas, those with the lowest immunization coverage and continuing transmission or prevalence.

"4) Given the reduced availability of external funding, each country should invite other NGO's and the private sector to participate in the EPI in order to assure maximum national coverage of vaccination programs and coordinated actions and programming.

"5) ICCs have been so successful for EPI in many countries that the model for cooperation is being applied to other child survival programs, and indeed, sometimes to overall child survival planning and coordination efforts. This has raised concerns

"5) ICCs have been so successful for EPI in many countries that the model for cooperation is being applied to other child survival programs, and indeed, sometimes to overall child survival planning and coordination efforts. This has raised concerns that in some cases the EPI ICC maybe converted into a general Child Survival ICC, thus reducing the time and attention devoted to EPI to the detriment of the program. The Regional ICC wishes to recommend that separate meetings continue to be held at the country level on the subject of EPI coordination and planning, in order to allow adequate time to accomplish these tasks. It may be necessary that this be done as a sub-group of the national child survival ICC, perhaps with operational level personnel rather than donor representatives and program directors. This could be especially important as the ICC is asked to take on a more active role in planning for and monitoring program financing as countries move towards more self-sufficiency in immunization programs. This model of sub-groups may be also useful for other topics such as diarrheal disease or acute respiratory infections control programs and other goals established by the Children's Summit."

III. OTHER INITIATIVES

1. Pertussis

In most of the Region of the Americas, information is inadequate to assess changes in pertussis epidemiology resulting from increases in DPT coverage. Efforts should be carried out to collect better epidemiological data on morbidity and mortality from pertussis and to develop studies to define the best case definition to be used to control the disease.

2. Hepatitis B

Hepatitis B vaccination programs should be initiated or continued in areas of high prevalence and among groups at high risk, with wider use depending on the epidemiological situation and resource availability. Vaccination of infants is best accomplished by integrating hepatitis B vaccine into national immunization programs. Vaccination of specific high risk groups, for example health care workers, should be continued.

Attempts should be made to include hepatitis B vaccine as a part of the revolving fund for vaccine purchases, so that the vaccine can be provided to participating countries at an affordable price.

Cost data for various countries should be obtained so that cost-benefit models can be applied to evaluate policies for routine infant immunization with hepatitis B vaccine.

Other efforts to reduce rates of hepatitis B virus transmission should be encouraged and continued, including education efforts to reduce risk behaviors, hepatitis B screening in blood donation centers, and promotion of safe injection practices.

3. Rubella Immunization Strategies

Although much is known about the impact of rubella and congenital rubella syndrome (CRS) in a few countries, there are insufficient data from most countries. The selection of appropriate rubella control strategies depends on knowledge of the epidemiology of rubella, the incidence of rubella infection in pregnancy and CRS, and the health impact of these.

There are three possible strategies for rubella control, namely routine infant immunization, selective immunization targeted at specific groups, and a combination of both of these. A strategy aiming to interrupt transmission of rubella through mass infant immunization using rubella vaccine administered simultaneously with measles vaccine, has potential risks. If coverage is not sufficient to interrupt transmission but merely shifts the age specific infection rate to older groups, then more cases of CRS could occur than would have occurred without immunization. Selective immunization of prepubertal girls and susceptible adult women does not bear this risk. However, this strategy may be difficult to implement because such groups are not readily accessible and such large scale programs are inefficient as many of those immunized are already immune through natural infection.

The ideal strategy is the achievement of high coverage with rubella vaccine administered with measles vaccine along with selective immunization ensuring that no women enter the child-bearing period susceptible to rubella. Unless such conditions can all be assured, including resources to support the program for the long term, vaccination strategy should target post-pubertal females to the extent that resources are available.

New surveillance systems, able to detect cases of CRS, rubella infections in pregnancy, and rubella susceptibility according to age and parity, need to be established. No reliance can be placed on clinical reporting of rubella.

4. Haemophilus influenzae B

Haemophilus influenzae type B conjugate vaccines, now licensed for use in a number of countries, may prove to be sufficiently cost-effective to be recommended for addition to the vaccines now being used. Such a decision awaits expanded studies of Haemophilus morbidity and vaccine efficacy in tropical countries and identification of resources to purchase the vaccine.

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executive committee of the directing council

working party of the regional committee

PAN AMERICAN HEALTH ORGANIZATION

WORLD HEALTH ORGANIZATION

109th Meeting
Washington, D.C.
June 1992

CD36/13 (Eng.)
ANNEX II

Provisional Agenda Item 4.6

CE109/13, ADD. I (Eng.)
18 June 1992
ORIGINAL: ENGLISH

PLAN OF ACTION FOR THE ERADICATION OF INDIGENOUS TRANSMISSION OF WILD POLIOVIRUS FROM THE AMERICAS

This attachment updates the progress report of the Director on the Plan of Action for Eradication of Indigenous Transmission of Wild Poliovirus from the Americas (Document CE109/13, 27 April 1992).

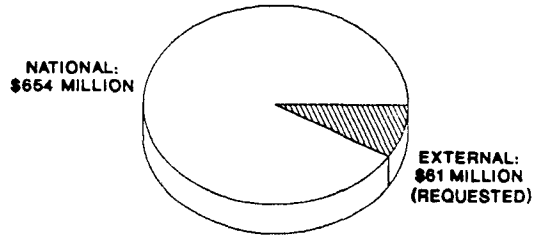
As of the Week No. 23 ending 6 June 1992, the only incidence of wild poliovirus detected in the Western Hemisphere during the last 52 weeks was the one in Junín, Peru, with date of onset 23 August 1991. (See attached Polio Surveillance in the Americas, Weekly Bulletin Vol. 7, No. 23, for the week ending 6 June 1992).

During April 1992, Chile implemented a mass-vaccination campaign in which nearly 100% of the children 1-14 years of age (approximately 4 million children) received a dose of measles vaccine. In May 1992 Brazil used the same approach and vaccinated over 95% of the same target population--over 47 million children--in the biggest vaccination campaign ever held anywhere in the world in such a short period of time. Both initiatives are part of the efforts of several countries of the Americas to further control or eliminate measles transmission. These two initiatives follow the successful efforts of Cuba and the English-speaking Caribbean, which implemented similar campaigns in 1987 and 1991, respectively. Central American countries have developed a plan for a similar approach, but resources are not yet identified for its full implementation. Success of these efforts will be critical for the eventual development of a regional strategy for elimination of measles from the Americas.

Financial analysis of the National Five-year Immunization Plans of Action from 14 countries reveal that a total of US$715 million will be needed for implementation of the programs in those countries between 1992-1996. Of these, $654 million (91%) are funds available from the countries themselves and another $61 million (9%) are needed from external sources. Of these, $42.2 million are already identified: PAHO ($21.9

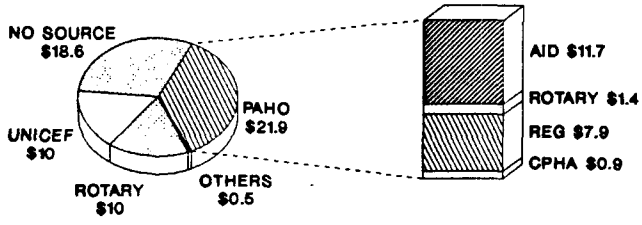
million, with $7.9 from its own funds, and the following grant funds: from USAID, $11.7 million; from Rotary International, $1.4 million; and from CPHA, $0.9 million); UNICEF, $10.0 million; Rotary International, $10.0 million; and others, $0.5 million. Still, there is a need to identify a source for another $18.6 million, which will be critical for smooth implementation of the five-year plans in these 14 countries (see Figures 1 and 2). Taking into consideration that there are still several countries for which five-year plans are not yet available for analysis, it is alarming to note that external support has declined substantially from the previous period (1987-1991). For comparison purposes, the Executive Committee is reminded that for that period, the total cost of the programs in 19 countries was $544.6 million, with $430.8 million from national sources and $113.8 million from the international collaborating agencies (see Figures 3 and 4).

FIGURE 1.
EPI NATIONAL & EXTERNAL FUNDS
PLANS OF ACTION, 1992-96 (US$ MILLIONS)



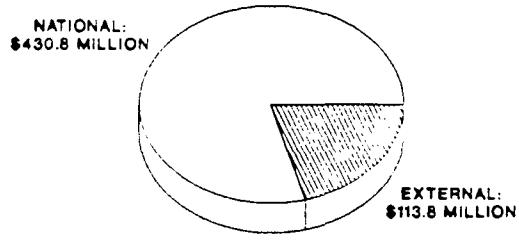
TOTAL COST: $715 MILLION
FOURTEEN COUNTRIES REPORTING

FIGURE 2.
EPI REQUEST FOR EXTERNAL FUNDS
PLANS OF ACTION, 1992-96 (US$ MILLIONS)



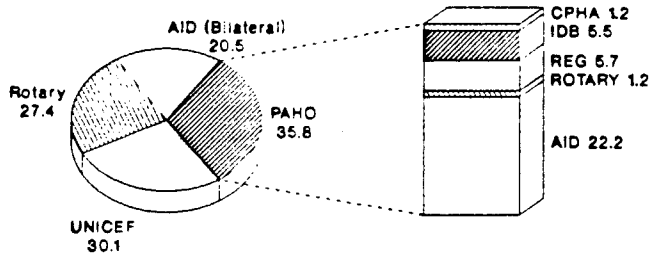
TOTAL COST: $61 MILLION
FOURTEEN COUNTRIES REPORTING

FIGURE 3.
EPI NATIONAL & EXTERNAL FUNDS
PLANS OF ACTION, 1987-91 (US$ MILLIONS)



TOTAL COST: $ 544.6
NINETEEN COUNTRIES REPORTING

FIGURE 4.
EPI REQUEST FOR EXTERNAL FUNDS
PLANS OF ACTION, 1987-91 (US$ MILLIONS)



TOTAL COST: $113.8 MILLION
NINETEEN COUNTRIES REPORTING

Annex

Pan American Health Organization
Pan American Sanitary Bureau, Regional Office of the
World Health Organization

Vol. 7, No. 23

Expanded Program on Immunization
Polio Surveillance in the Americas

Weekly Bulletin for the week ending 6 June 1992

Poliovirus Surveillance

Last wild poliovirus was detected on 5 September 1991, in Peru

Table No. 1
Status of Analysis of Stool Samples, by Laboratory and Country,
Last 52 Weeks (91/24 - 92/23)

LAB.	CNTRY.	TOTAL *	WITHOUT RESULTS			ENTEROVIRUS ISOLATION							
			Not yet in Lab	<10 wks	>10 wks	% ISOLATION	NEG.	OTHER ENTEROVIRUS	CHARACTERIZATION Pending	Lab.	Vaccine	Wild P1	Wild P3
CAR	DOR	9	0	0	0	33.3	6	3	0	-----	0	0	0
	GUY	3	0	0	0	0.0	3	0	0	-----	0	0	0
	HAI	11	3	0	0	25.0	6	2	0	-----	0	0	0
	JAM	1	0	0	0	0.0	1	0	0	-----	0	0	0
	SUR	5	2	0	0	66.7	1	2	0	-----	0	0	0
	TRT	4	0	0	0	0.0	4	0	0	-----	0	0	0
FIO	BOL	54	10	9	8	25.9	20	5	0	FIO	2	0	0
	BRA	710	36	33	5	13.2	552	54	3	FIO	27	0	0
	PER	92	4	5	3	35.0	52	20	1	FIO	6	1	0
INC	COR	5	1	1	0	0.0	3	0	0	-----	0	0	0
	ELS	54	5	2	0	36.2	30	14	0	CDC	3	0	0
	GUT	76	0	5	0	31.0	49	20	0	CDC	2	0	0
	HON	21	1	2	0	44.4	10	8	0	-----	0	0	0
	NIC	17	0	1	0	25.0	12	4	0	-----	0	0	0
	PAN	10	0	0	1	33.3	6	3	0	-----	0	0	0
INH	VEN	90	4	0	0	30.2	60	24	1	CDC	1	0	0
INS	COL	145	4	10	0	19.1	106	22	3	-----	0	0	0
	ECU	61	6	10	2	27.9	31	9	1	CDC	2	0	0
LSP	MEX	270	0	10	1	19.3	209	46	2	CDC	2	0	0
MAL	ARG	50	1	0	3	26.1	34	9	0	MAL	3	0	0
	PAR	22	3	6	1	25.0	9	3	0	-----	0	0	0
	URU	2	1	0	0	0.0	1	0	0	-----	0	0	0
TOTAL		1712	81	94	24	20.4	1205	248	11		48	1	0

* Each sample relates to an individual

Table No. 2
STATUS OF POLIOVIRUS PENDING INTRATYPIC DIFFERENTIATION
Last 52 Weeks (91/24 - 92/23)

LAB	COUNTRY	POLIOVIRUS NOT YET IN LAB P1	P2	P3	MIX	IN LAB < 4 Wks P1	P2	P3	MIX	IN LAB > 4 Wks P1	P2	P3	MIX	TOTAL
INC	COL	1	1	1	0	0	0	0	0	0	0	0	0	3
	ECU	0	1	0	0	0	0	0	0	0	0	0	0	1
	MEX	0	1	0	0	0	0	1	0	0	0	0	0	2
	VEN	0	0	0	1	0	0	0	0	0	0	0	0	1
FIO	BRA	0	0	1	2	0	0	0	0	0	0	0	0	3
	PER	0	0	0	0	0	0	0	0	0	0	0	1	1
TOTAL		1	3	2	3	0	0	1	0	0	0	0	1	11

Table No. 3
WILD POLIOVIRUS ISOLATED
Last 52 Weeks (91/24 - 92/23)

SITE COUNTRY	SITE STATE	VIRUS TYPE	DATE OF COLLECTION	WK
Peru	Junin	P1	09/05/91	36

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Expanded Program on Immunization
Polio Surveillance in the Americas

Weekly Bulletin for the week ending 6 June 199

Acute Flaccid Paralysis Surveillance

Table No. 1
REPORTED CASES OF ACUTE FLACCID PARALYSIS AND RATE PER 100,000 POPULATION UNDER 15 YEARS OF AGE

SITE	TOTAL CASES 1991	TOTAL RATE 1991	CUMULATIVE CASES 1992	CUMULATIVE RATE 1992*
ARG	94	0.97	31	0.72
BOL	66	2.05	18	1.27
BRA	1004	1.90	192	0.82
CAN	0	0.00	0	0.00
CAR	19	0.38	6	0.27
CHI	104	2.58	37	2.07
COL	186	1.62	71	1.40
COR	5	0.46	3	0.62
CUB	12	0.53	8	0.80
DOR	16	0.59	6	0.50
ECU	60	1.37	29	1.50
ELS	84	3.60	20	1.94
GUT	86	2.06	33	1.79
HAI	16	0.63	2	0.18
HON	35	1.53	10	0.99
MEX	433	1.31	151	1.04
NIC	24	1.35	6	0.76
PAN	8	0.95	6	1.61
PAR	23	1.33	20	2.62
PER	98	1.12	34	0.88
URU	5	0.61	2	0.55
USA	0	0.00	0	0.00
VEN	105	1.39	33	0.99
TOTAL	2483	1.10	718	0.72

* ADJUSTED

Table No. 2
CASES OF ACUTE FLACCID PARALYSIS UNDER INVESTIGATION BY WEEK OF REPORT

SITE	TOTAL 1991	CUM 1992	WEEKS 1- 4	5- 8	9-12	13-16	17	18	19	20	21	22	23
ARG	11	28	1	9	7	4	1	0	1	3	2	0	NR
BOL	0	6	0	0	0	0	3	1	0	1	1	0	0
BRA	2	114	4	5	18	27	8	7	7	6	16	14	2
CAN	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	4	1	1	0	1	0	0	0	0	1	0	0
CHI	12	36	4	8	4	7	3	1	0	1	1	3	4
COL	2	52	2	5	10	10	11	3	6	4	1	0	NR
COR	0	3	0	0	0	0	1	1	0	1	NR	NR	NR
CUB	0	8	0	0	3	3	2	0	0	0	0	0	0
DOR	0	1	0	0	0	0	0	0	0	0	0	1	0
ECU	0	24	2	6	1	1	0	6	2	0	6	0	0
ELS	0	16	1	1	3	2	1	0	0	2	0	6	0
GUT	0	18	0	0	0	2	2	1	0	6	3	2	2
HAI	11	2	0	0	0	0	0	1	0	0	1	0	0
HON	0	6	0	0	2	1	1	1	0	0	1	0	0
MEX	1	47	0	1	2	10	2	4	10	3	6	4	5
NIC	0	1	0	0	1	0	0	0	0	0	0	0	0
PAN	0	1	0	0	0	0	0	0	0	0	0	1	0
PAR	0	17	1	1	4	4	0	2	0	1	2	1	1
PER	0	12	0	0	0	3	1	1	1	2	1	0	3
URU	0	2	1	0	1	0	0	0	0	0	0	0	0
USA	0	0	0	0	0	0	0	0	0	0	0	0	0
VEN	3	15	2	1	0	3	2	2	0	1	1	2	1
TOTAL	42	413	19	38	56	78	38	31	27	31	43	34	18

NR NO REPORT RECEIVED

Table No. 3
CONFIRMED CASES OF POLIOMYELITIS AS OF WEEK 23

SITE	TOTAL 1991	CUMULATIVE 1991	CUMULATIVE 1992
ARG	0	0	0
BOL	0	0	0
BRA	0	0	0
CAN	0	0	0
CAR	0	0	0
CHI	0	0	0
COL	8	8	0
COR	0	0	0
CUB	0	0	0
DOR	0	0	0
ECU	0	0	0
ELS	0	0	0
GUT	0	0	0
HAI	0	0	0
HON	0	0	0
MEX	0	0	0
NIC	0	0	0
PAN	0	0	0
PAR	0	0	0
PER	1	0	0
URU	0	0	0
USA	0	0	0
VEN	0	0	0
TOTAL	9	8	0

Table No. 4
POLIO COMPATIBLE CASES BY WEEK OF ONSET

SITE	TOTAL 1991	CUMULATIVE 1991	CUMULATIVE 1992
ARG	8	2	0
BOL	1	0	0
BRA	11	8	0
CAN	0	0	0
CAR	0	0	0
CHI	0	0	0
COL	13	6	0
COR	0	0	0
CUB	0	0	0
DOR	0	0	1
ECU	1	1	0
ELS	0	0	0
GUT	2	1	0
HAI	0	0	0
HON	0	0	0
MEX	1	0	0
NIC	1	1	0
PAN	0	0	0
PAR	0	0	0
PER	2	0	0
URU	0	0	0
USA	0	0	0
VEN	2	1	0
TOTAL	42	20	1

CAR INCLUDES REPORTS FROM ALL CAREC MEMBER COUNTRIES

directing council *regional committee*

PAN AMERICAN HEALTH ORGANIZATION

WORLD HEALTH ORGANIZATION

XXXVI Meeting XLIV Meeting

Washington, D.C.
September 1992

Provisional Agenda Item 5.3

CD36/13, ADD. I (Eng.)
14 September 1992
ORIGINAL: ENGLISH

PLAN OF ACTION FOR THE ERADICATION OF INDIGENOUS TRANSMISSION OF WILD POLIOVIRUS FROM THE AMERICAS

Update on Polio Surveillance

During 1992, as of week 36, ending 5 September, no cases of paralytic poliomyelitis due to wild poliovirus were detected in the entire Western Hemisphere.

The last case had its onset on 23 August 1991, in Junín, Peru. This is the first time in the history of the Western Hemisphere that no cases of paralytic poliomyelitis due to wild poliovirus are detected for an entire year. (See Weekly Bulletin on Poliovirus Surveillance, Vol. 7, No. 36, for the week ending 5 September 1992, annexed.)

Annex

Pan American Health Organization
Pan American Sanitary Bureau, Regional Office of the
World Health Organization

Vol. 7, No. 36

Expanded Program on Immunization
Polio Surveillance in the Americas

Weekly Bulletin for the week ending 05 September 1992

Poliovirus Surveillance

Last wild poliovirus was detected on 5 September 1991, in Peru

Table No. 1
Status of Analysis of Stool Samples, by Laboratory and Country,
Last 52 Weeks (91/37 - 92/36)

LAB.	CNTRY.	TOTAL *	WITHOUT RESULTS			%	NEG.	ENTEROVIRUS ISOLATION					
			Not yet in Lab	<10 wks	>10 wks	ISOLATION		OTHER ENTERO-VIRUS	CHARACTERIZATION Pending	Lab.	Vaccine	Wild P1	Wild P3
CAR	DOR	13	0	2	0	36.4	7	4	0	-----	0	0	0
	GUY	3	0	0	0	0.0	3	0	0	-----	0	0	0
	HAI	5	1	†	0	33.3	2	1	0	-----	0	0	0
	JAM	2	0	0	0	0.0	2	0	0	-----	0	0	0
	SUR	3	0	0	0	66.7	1	2	0	-----	0	0	0
	TRT	7	0	0	0	14.3	6	1	0	-----	0	0	0
FIO	BOL	49	5	1	2	24.4	31	7	2	FIO	1	0	0
	BRA	468	21	47	2	22.1	310	68	1	FIO	19	0	0
	PER	88	0	16	5	37.3	42	19	0	FIO	6	0	0
INC	COR	8	1	0	0	42.9	4	3	0	-----	0	0	0
	ELS	55	3	5	3	36.4	28	14	0	CDC	2	0	0
	GUT	78	0	5	0	38.4	45	28	0	-----	0	0	0
	HON	19	0	3	0	50.0	8	8	0	-----	0	0	0
	NIC	15	0	1	0	21.4	11	3	0	-----	0	0	0
	PAN	12	2	1	0	22.2	7	2	0	-----	0	0	0
INH	VEN	89	2	9	0	33.3	52	22	3	INH	1	0	0
INS	COL	144	12	1	1	23.8	99	27	0	CDC	4	0	0
	ECU	75	16	5	7	34.0	31	11	0	CDC	5	0	0
LSP	MEX	309	0	32	7	17.4	223	40	5	CDC	2	0	0
MAL	ARG	44	3	2	3	22.2	28	6	0	MAL	2	0	0
	CHI	7	0	1	0	0.0	6	0	0	-----	0	0	0
	PAR	24	2	1	2	15.8	16	2	0	MAL	1	0	0
	URU	4	1	1	0	0.0	2	0	0	-----	0	0	0
TOTAL		1521	69	134	32	25.1	964	268	11		43	0	0

* Each sample relates to an individual

Table No. 2
STATUS OF POLIOVIRUS PENDING INTRATYPIC DIFFERENTIATION
Last 52 Weeks (91/37 - 92/36)

LAB	COUNTRY	POLIOVIRUS NOT YET IN LAB				IN LAB < 4 Wks				IN LAB > 4 Wks				TOTAL
		P1	P2	P3	MIX	P1	P2	P3	MIX	P1	P2	P3	MIX	
CDC	MEX	1	0	3	0	0	0	0	0	0	0	1	0	5
	VEN	0	1	1	1	0	0	0	0	0	0	0	0	3
IO	BOL	0	0	0	0	1	0	0	1	0	0	0	0	2
	BRA	0	0	1	0	0	0	0	0	0	0	0	0	1
TOTAL		1	1	5	1	1	0	0	1	0	0	1	0	11

Table No. 3
WILD POLIOVIRUS ISOLATED
Last 52 Weeks (91/37 - 92/36)

SITE COUNTRY	SITE STATE	VIRUS TYPE	DATE OF COLLECTION	WK
Peru	Junin	P1	09/05/91	36

Vol. 7, No. 36

Expanded Program on Immunization
Polio Surveillance in the Americas

Weekly Bulletin for the week ending 05 September 1992

Acute Flaccid Paralysis Surveillance

Table No.1
REPORTED CASES OF ACUTE FLACCID PARALYSIS AND RATE PER 100,000 POPULATION UNDER 15 YEARS OF AGE

SITE	TOTAL CASES 1991	TOTAL RATE 1991	CUMULATIVE CASES 1992	CUMULATIVE RATE 1992*
ARG	93	0.96	56	0.84
BOL	66	2.05	26	1.17
BRA	588	1.11	323	0.88
CAN	0	0.00	0	0.00
CAR	20	0.40	11	0.32
CHI	103	2.55	53	1.90
COL	187	1.63	134	1.68
COR	5	0.46	8	1.06
CUB	12	0.53	14	0.90
DOR	17	0.63	14	0.74
ECU	60	1.37	55	1.81
ELS	84	3.60	35	2.17
GUT	87	2.08	60	2.07
HAI	16	0.63	4	0.23
HON	35	1.53	15	0.95
MEX	432	1.31	246	1.08
NIC	24	1.35	8	0.65
PAN	8	0.95	10	1.71
PAR	23	1.33	22	1.84
PER	98	1.12	55	0.91
URU	5	0.61	4	0.70
USA	0	0.00	0	0.00
VEN	105	1.39	66	1.26
TOTAL	2068	1.27	1219	1.08

* ADJUSTED

Table No. 2
CASES OF ACUTE FLACCID PARALYSIS UNDER INVESTIGATION BY WEEK OF REPORT

SITE	TOTAL 1991	CUM 1992	WEEKS 1- 4	5- 8	9-12	13-16	17-20	21-24	25-28	29-32	33	34	35	36
ARG	1	31	0	2	4	1	3	4	8	7	2	0	0	NR
BOL	0	14	0	0	0	0	5	5	4	0	0	0	0	0
BRA	0	132	0	1	7	4	13	25	29	29	11	8	5	0
CAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	5	0	1	0	0	0	0	2	1	0	1	NR	NR
CHI	12	50	4	8	3	6	5	12	4	8	0	0	0	0
COL	0	76	0	4	4	4	10	10	13	18	6	3	3	1
COR	0	1	0	0	0	0	0	0	0	1	0	0	0	0
CUB	0	9	0	0	0	2	1	1	2	1	1	1	0	0
DOR	0	5	0	0	0	0	0	0	3	2	0	0	0	0
ECU	0	45	2	6	1	1	5	9	8	9	1	3	0	0
ELS	0	16	0	0	0	0	0	3	1	3	2	2	3	2
GUT	1	23	0	0	0	0	0	0	3	11	6	0	3	0
HAI	3	4	0	0	0	0	1	1	0	2	0	0	0	0
HON	0	9	0	0	2	0	2	2	3	0	0	0	0	NR
MEX	0	56	0	0	0	1	0	5	25	24	1	0	0	0
NIC	0	2	0	0	0	0	0	0	0	1	1	0	0	0
PAN	0	3	0	0	0	1	0	1	0	0	0	0	1	0
PAR	0	10	0	0	1	1	2	4	0	0	0	2	0	0
PER	0	17	0	0	0	0	0	2	0	7	3	0	3	2
URU	0	2	0	0	0	0	0	1	0	1	0	0	0	NR
USA	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VEN	2	29	0	0	0	1	0	3	8	11	2	2	2	0
TOTAL	20	539	6	22	22	22	47	88	113	136	36	22	20	5

NR NO REPORT RECEIVED

Table No. 3
CONFIRMED CASES OF POLIOMYELITIS AS OF WEEK 36

SITE	TOTAL 1991	CUMULATIVE 1991	CUMULATIVE 1992
ARG	0	0	0
BOL	0	0	0
BRA	0	0	0
CAN	0	0	0
CAR	0	0	0
CHI	0	0	0
COL	8	8	0
COR	0	0	0
CUB	0	0	0
DOR	0	0	0
ECU	0	0	0
ELS	0	0	0
GUT	0	0	0
HAI	0	0	0
HON	0	0	0
MEX	0	0	0
NIC	0	0	0
PAN	0	0	0
PAR	0	0	0
PER	1	1	0
URU	0	0	0
USA	0	0	0
VEN	0	0	0
TOTAL	9	9	0

Table No. 4
POLIO COMPATIBLE CASES BY WEEK OF ONSET

SITE	TOTAL 1991	CUMULATIVE 1991	CUMULATIVE 1992
ARG	12	8	0
BOL	1	0	0
BRA	10	9	4
CAN	0	0	0
CAR	0	0	1
CHI	0	0	1
COL	12	10	0
COR	0	0	0
CUB	0	0	0
DOR	1	0	0
ECU	1	1	0
ELS	0	0	1
GUT	2	1	0
HAI	1	1	0
HON	0	0	0
MEX	1	1	3
NIC	1	1	0
PAN	0	0	0
PAR	0	0	0
PER	2	1	0
URU	0	0	0
USA	0	0	0
VEN	3	2	1
TOTAL	47	35	11

CAR INCLUDES REPORTS FROM ALL CAREC MEMBER COUNTRIES