directing council | *regional committee*

PAN AMERICAN HEALTH ORGANIZATION

WORLD HEALTH ORGANIZATION

XXXV Meeting

XLIII Meeting

Washington, D.C.
September 1991

Provisional Agenda Item 5.3

CD35/15 (Eng.)
16 July 1991
ORIGINAL: ENGLISH

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

The 107th Meeting of the Executive Committee reviewed the progress report presented by the Director of the Pan American Sanitary Bureau on the latest developments of the Expanded Program on Immunization (EPI) and the efforts to eradicate poliomyelitis from the Americas.

The report indicates that immunization coverage levels reached an all-time high of over 75% for each of the vaccines included in the program (DPT, polio, measles and BCG). This represents a victory for public health, considering that only a decade ago coverage for these vaccines was around 20%. The discussions of the Committee highlighted the fact that coverage still needs to be further increased if the Region is to achieve immunization of all children, and noted that impediments include the many missed opportunities for vaccination during routine maternal and child health care services.

The Committee noted the substantial progress made towards the eradication of polio and stressed the importance and difficulties posed by the last phase of the program to interrupt transmission, which remains at low levels in the coastal areas of Colombia and in central and northern Peru. Considerable efforts will be needed in the coming months to finally conquer the disease. In the efforts to stop polio, there was much progress in the development of surveillance systems. The disease control infrastructure has been strengthened, including a functioning network of laboratories. This in itself justifies the efforts made by the countries.

Furthermore, in order that new challenges can be faced in the next five years, such as the elimination of neonatal tetanus and the control of measles, the Committee discussed the strategies that could be followed

based on the experience gained thus far. For example, the strategy to concentrate resources in the high-risk areas should be pursued. In relation to measles control, the Director was requested to monitor the strategies being applied in the Caribbean for evaluating the feasibility of using the same approaches in the rest of the Hemisphere.

Nevertheless, the Committee stressed the fact that the key for success, besides political commitment and sound strategies, is the proper allocation of resources in national budgets to meet the basic needs of the program, such as vaccines and syringes.

The XXXV Meeting of the Directing Council is requested to review the annexed report (Document CE107/9 and ADD. I) and consider Resolution IV of the 107th Meeting of the Executive Committee, as follows:

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

THE 107th MEETING OF THE EXECUTIVE COMMITTEE,

Having reviewed the Progress Report presented by the Director on the Plan of Action for the Eradication of Indigenous Transmission of Wild Poliovirus from the Americas (Document CE107/9 and ADD. I),

RESOLVES:

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

THE XXXV MEETING OF THE DIRECTING COUNCIL,

Having considered and examined the progress report presented by the Director (Document CD35/15) on the implementation of the Expanded Program on Immunization and the Plan of Action for the Eradication of Indigenous Transmission of Wild Poliovirus from the Americas;

Noting with satisfaction that: a) immunization coverage levels for children under one year of age have achieved at least 75% for each of the vaccines included in the program (DPT, polio, measles, and BCG), the highest level ever achieved in the Americas; b) transmission of wild poliovirus has been virtually interrupted in the Hemisphere, with only 17 cases reported in 1990 and only two during the first six months of 1991; and c) considerable progress has been made in regard to strategies to control or eliminate neonatal tetanus and measles; and

Recognizing that considerable efforts will be needed to: a) achieve final eradication of indigenous transmission of wild poliovirus in the few remaining foci; b) maintain and increase the overall immunization coverage levels; c) control or eliminate neonatal tetanus and measles; and d) include new vaccines in the national immunization programs,

RESOLVES:

1. To congratulate all Member Governments and their health workers on the progress achieved so far, which demonstrates their high level of commitment to the health of the children of this Hemisphere.

2. To express appreciation and request continued support from the various agencies (AID, UNICEF, IDB, Rotary International, and the Canadian Public Health Association) which, together with PAHO, have given strong support to the national immunization programs and efforts to eradicate poliomyelitis.

3. To commend the Organization for its enthusiastic, outstanding support of the Member Governments' efforts to implement their national immunization programs and eradicate poliomyelitis.

4. To urge Member Governments to adopt the "Priorities for Action" described in Chapter II of the Progress Report (Document CD35/15), to ensure that:

a) Immunization coverage is monitored by "municipios" and that missed opportunities for vaccination are eliminated;

b) All vaccines used in the program conform to the minimum requirements of PAHO/WHO;

c) Weekly negative reports are transmitted in a timely manner from all health facilities included in the surveillance system and that the PAHO reward of $100.00 for any person reporting the first confirmed polio case of an outbreak is widely publicized by all countries;

d) "Mop-up" operations are properly implemented, with two rounds of house-to-house vaccination, one month apart, in which all children under five years of age living in a wide area, usually encompassing several districts, receive one dose OPV in each round, regardless of their previous vaccination status;

e) The surveillance system records separately neonatal and post-neonatal tetanus cases, and that vaccination programs are implemented in those districts already identified as at risk;

f) Human and financial resources are assigned to the program in the national health budgets and in the 1991-1996 national EPI Work Plans.

5. To request the Director to:

a) Apply all the needed measures to ensure the final interruption of transmission of wild poliovirus in the Western Hemisphere;

b) Evaluate the strategies for measles control/elimination being used in Cuba and the English-speaking Caribbean and the feasibility of their implementation in the rest of the Western Hemisphere;

c) Monitor the activities for neonatal tetanus control in those areas identified as at risk and support the expansion of surveillance to verify the degree of impact;

d) Continue aggressive efforts to mobilize the needed additional resources to face the challenges described in the Progress Report;

e) Report on the progress of the program to the XXXVI Meeting of the Directing Council in 1992.

Annex

executive committee of the directing council

working party of the regional committee

PAN AMERICAN HEALTH ORGANIZATION

WORLD HEALTH ORGANIZATION

CD35/15 (Eng.)
ANNEX

107th Meeting
Washington, D.C.
June 1991

Provisional Agenda Item 4.3

CE107/9 (Eng.)
4 April 1991
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 107th Meeting of the Executive Committee in response to Resolution X of the XXIII Pan American Sanitary Conference, held in September 1990.

The Progress Report outlines the advances made by the countries of the Region towards the goal of providing immunization services to all children in the Region, and their efforts to eradicate the indigenous transmission of wild poliovirus from the Americas, as well as the achievement of further control of other immunizable diseases, such as neonatal tetanus, measles and hepatitis B: The report recognizes that considerable progress has been made in all these areas, but there is still much to be done if the proposed goals are to be reached. Poliomyelitis is on the verge of being interrupted, with only a few remaining foci that are now being aggressively dealt with. Activities related to neonatal tetanus elimination have been launched by several countries and preliminary results are encouraging. The efforts to eliminate measles in Cuba and the English-speaking Caribbean countries are to be examined closely, as they could serve as a model for future control or elimination of measles in the rest of the Western Hemisphere.

Finally, the report describes the main priorities for immediate action by Member Countries, in order that the gains of the program can be consolidated and further improved and the new targets set for the decade addressed with the same energy as the previous ones. All international agencies that collaborate with the Member Countries in this area of activity are called upon to continue and expand their support, and the countries themselves are urged to renew and increase their commitment, including proper allocation of the financial and human resources needed for program implementation in facing the new challenges.

CONTENTS

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

I. PROGRESS TO DATE

1. Immunization Coverage

Provisional data on immunization coverage for children under one year of age for the Region of the Americas is shown in Table 1. As in previous years, coverage continued to increase and for the first time in history coverage was above 70% for all the vaccines included in the Program: DPT, OPV, measles and BCG. Every subregion (Caribbean, Andean, Central America, Southern Cone, Brazil and Mexico) has also achieved this high level of coverage, and there are very few countries that report coverage below 60% for any of the vaccines.

The increase in coverage over the last ten years--from as low as 15% for DPT vaccine in 1979 to the level achieved in 1990 of 73%--is in itself a major public health success story that demonstrates that when there is a clear public health objective, sound program strategies, and the political will and resources, the target can be achieved.

Considering that the coverage with the first dose of multiple-dose vaccines such as DPT and OPV is above 90%, declining to just above 70% for the third dose due to drop-out from first to last dose, one can assume that the goal of EPI for 1990, that is, availability of immunization services to all children, has been achieved. The combination of several immunization tactics, such as delivery of vaccines through all health facilities and the utilization of national or district vaccination days with all EPI antigens, has assured that these services are available to all of the population. The challenge ahead is to eliminate the high drop-out rates and assure that immunization schedules are completed on time, before children reach one year of age. In spite of aggressive interventions by many countries to modify this situation, missed vaccination opportunities still account for most of the unvaccinated children in the Region. These missed opportunities are mainly due to false contra-indications imposed by the attending health worker (Figure 1).

As reported last year, the immunization programs in the Americas are preventing some 30,000 deaths due to measles, whooping cough and neonatal tetanus and another 5,000 cases of poliomyelitis. Still, it is estimated that another 15,000 deaths resulting from these diseases could be prevented if immunization coverage reached 90% or above.

Table 1

VACCINE COVERAGE IN THE REGION OF THE AMERICAS, 1989-1990

REGION & COUNTRY	POPULATION (less than 1 year)		OPV3 %		DPT3 %		MEASLES %		BCG %	
	89	90	89	90	89	90	89	90	89	90
ANDEAN REGION	2,456,562	2,363,278	69	76	60	71	55	67	72	79
Bolivia	261,582	221,956	49	50	39	41	47	53	28	48
Colombia	669,809	685,108	90	93	78	87	64	82	94	95
Ecuador	316,622	320,852	64	67	55	68	57	61	91	88
Peru	670,000	600,904	60	73	58	72	52	64	62	83
Venezuela	538,549	534,458	67	72	55	63	50	62	68	63
BRAZIL*	4,307,582	3,610,961	97	93	54	81	58	78	70	78
CENTRAL AMERICA	989,404	1,016,513	71	80	65	74	69	78	59	70
Belize	6,701	7,200	71	80	71	84	68	81	87	80
Costa Rica	82,451	82,500	87	95	87	95	78	90	90	92
El Salvador	182,173	186,267	64	76	64	76	73	75	63	60
Guatemala	339,385	349,847	58	74	50	66	54	68	21	62
Honduras	174,262	180,721	86	87	85	84	94	90	80	71
Nicaragua	143,200	148,085	85	86	66	65	63	82	92	81
Panama	61,232	61,893	72	86	70	86	73	99	87	97
SOUTHERN CONE	1,144,876	1,090,660	83	90	82	88	85	92	88	98
Argentina	677,398	602,288	86	89	80	85	89	95	92	100
Chile	279,150	293,556	95	100	95	100	91	98	95	97
Paraguay *	134,928	138,802	41	76	61	78	53	69	53	90
Uruguay	53,400	56,014	88	88	88	88	82	82	99	99
LATIN CARIBBEAN	606,619	616,560	71	74	61	67	56	73	57	79
Cuba *	187,529	186,658	95	94	95	92	97	94	97	98
Haiti	201,707	207,637	50	40	50	41	31	31	40	72
Dominican Rep.*	217,383	222,265	70	90	43	69	43	96	38	68
MEXICO	2,579,200	1,970,515	96	96	65	66	85	78	80	70
LATIN AMERICA	12,084,243	10,668,487	86	87	62	75	66	77	73	78
ENGLISH CARIBBEA	131,672	134,637	82	86	82	86	72	75	61	62
Anguilla	157	200	100	100	100	100	92	100	100	100
Antigua	1,088	1,114	100	100	100	100	95	89	-	-
Bahamas	5,641	6,013	82	82	86	86	87	87	-	-
Barbados	4,032	4,040	80	90	78	91	85	87	-	-
Cayman Islands	378	434	93	100	93	100	89	89	81	81
Dominica	1,715	1,745	94	94	92	94	88	88	99	99
Grenada	2,613	2,650	86	69	87	80	89	85	-	-
Guyana	17,658	18,500	79	79	77	83	69	73	76	85
Jamaica	57,487	59,104	84	87	85	86	71	74	100	98
Montserrat	199	154	93	100	93	100	89	100	60	100
St. Kitts & Nevis	924	980	100	100	100	100	90	100	-	-
St. Lucia	3,530	4,380	93	90	92	89	91	82	100	94
St. Vincent	2,482	2,505	97	92	98	98	100	96	99	100
Suriname	10,000	9,000	71	81	72	83	73	65	-	-
Trinidad & Tobago	23,280	23,280	77	87	77	82	59	70	-	-
Turks & Caicos Isl.	250	300	89	98	89	97	76	81	100	100
British Virgin Isl.	238	238	97	100	100	100	87	100	100	100
NORTH AMERICA	3,998,895	4,009,883								
Bermuda	895	883	76	62	74	62	67	63	-	-
Canada	358,000	362,000	---	---	---	---	---	---	---	---
USA	3,640,000	3,647,000	---	---	---	---	---	---	---	---
TOTAL**	16,214,810	14,813,007	86	87	62	76	66	77	73	78

- Vaccine not in use

--- No data available

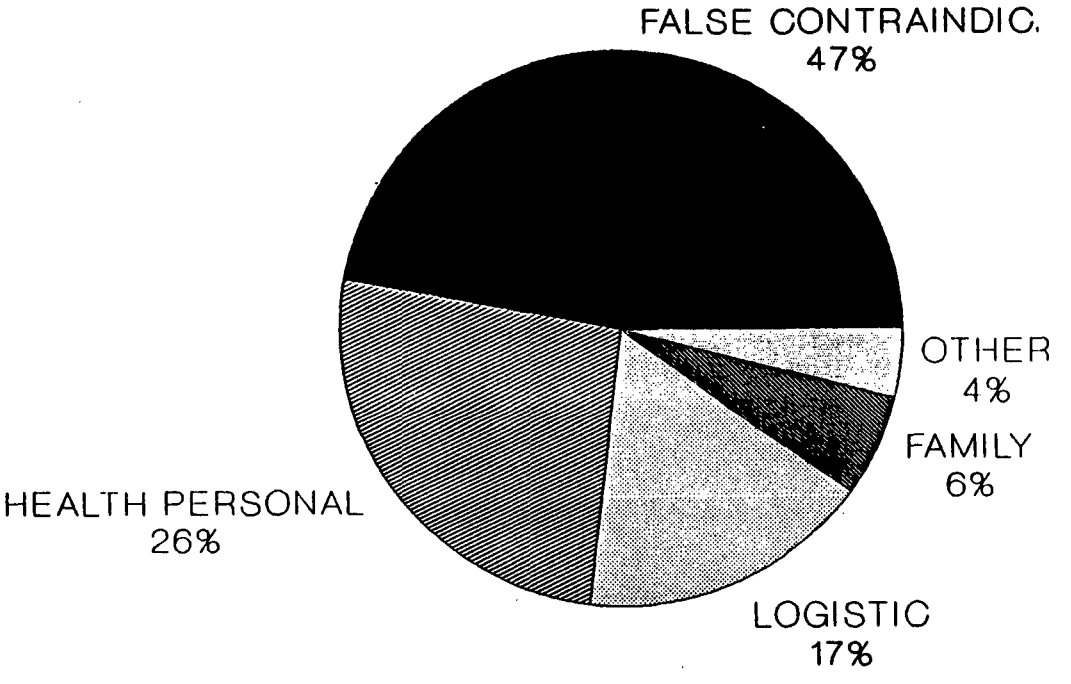
* Coverage calculated with two doses of OPV

** TOTAL coverage does not include North America

Source: PAHO

Figure 1

REASONS FOR MISSED OPPORTUNITIES LATIN AMERICA



Source: Revision of 13 Studies performed in the Americas, 1988-1990 PAHO

2. Poliomyelitis Eradication

The PAHO Technical Advisory Group (TAG) on vaccine-preventable diseases held its Ninth Meeting in Guatemala City, Guatemala, from 12-16 March 1991.

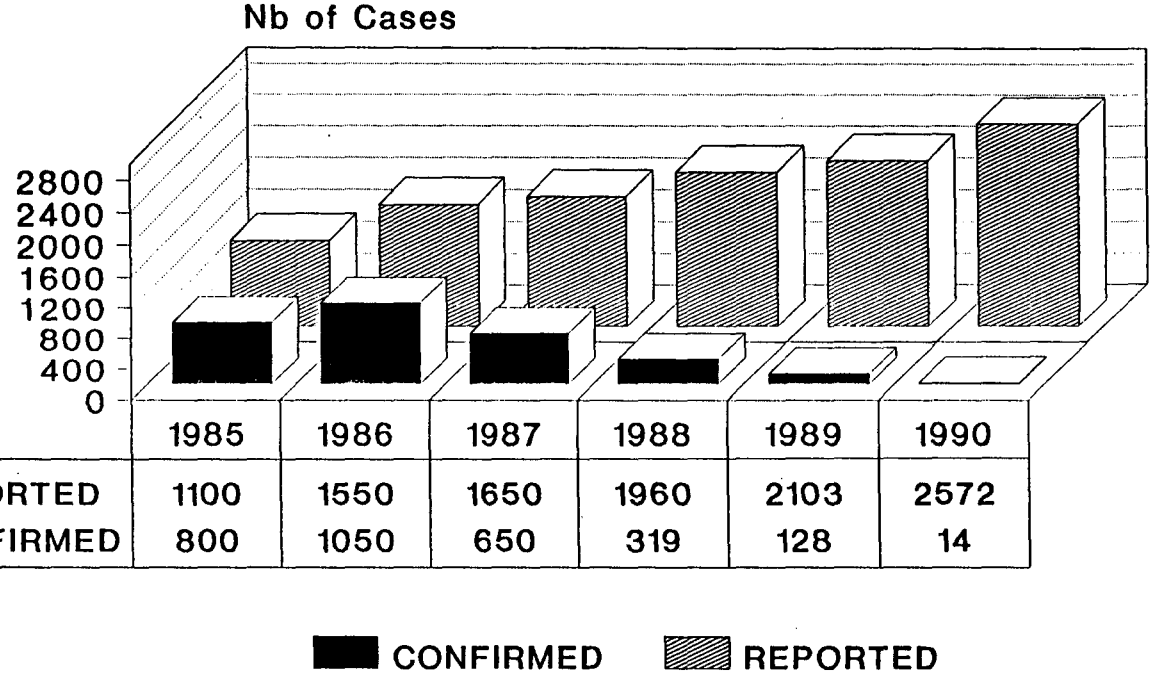
Its Final Report notes that each TAG meeting has documented significant progress over the previous one; this ninth meeting marked yet another new level of achievement. Poliovirus transmission appears on the verge of being interrupted throughout the Western Hemisphere. Despite examination of over 2,000 stool specimens, only 14 during 1990 have revealed wild poliovirus. Over four years have elapsed since the last isolation of wild poliovirus in the Southern Cone countries, more than eight years since an isolate has been found in the English-speaking Caribbean, more than three years since the last isolation of indigenous wild poliovirus in Central America (the last three isolates appear to have originated from a recent introduction from Mexico), two years since the last in Brazil and five months in Mexico. It is notable that the 14 wild poliovirus isolates detected during 1990 represented a decrease of 40% compared with the 24 registered in 1989. The significance of these findings is even more remarkable when one takes into account the enormous improvement in surveillance for acute flaccid paralysis during the last year. In all, 2,572 reports were investigated, the largest number investigated to date in a single year (Figure 2). The first and only case detected so far in 1991 was in Cartagena, Colombia, in January 1991.

The TAG recognizes that this tremendous progress can be attributed in substantial measure to the political and social commitment, which has generated a high priority for immunization programs in all countries of the Americas and within PAHO. In addition, the combination of strategies so effectively used with national vaccination days, and mopping-up operations complementing vaccination activities carried out daily at health facilities, is having a great impact toward increasing vaccination coverage. The high level of coordination achieved between all the governments and agencies that are supporting immunization efforts in the Western Hemisphere (USAID, UNICEF, Rotary, IDB, CPHA and PAHO) is also critical for smooth and creative implementation of the program and for optimal use of available resources.

There has been a considerable improvement in all performance indicators, including the increase in the number of health units which participate in the weekly surveillance system (now nearly 20,000). Approximately 70% of these units report promptly each week (Figure 3). The increase in the proportion of acute flaccid paralysis cases being reported within 15 days of onset is nearly 80%, and the increase in the proportion of acute flaccid paralysis cases with final diagnoses is now 95%. Additionally, there is a commendable increase in the number of "municipios" which are maintaining immunization coverage rates over 80%, almost 60% of the 7,408 "municipios" for which information is available.

Figure 2

NUMBER OF POLIO CASES REPORTED AND CONFIRMED IN THE AMERICAS, 1985 - 1990

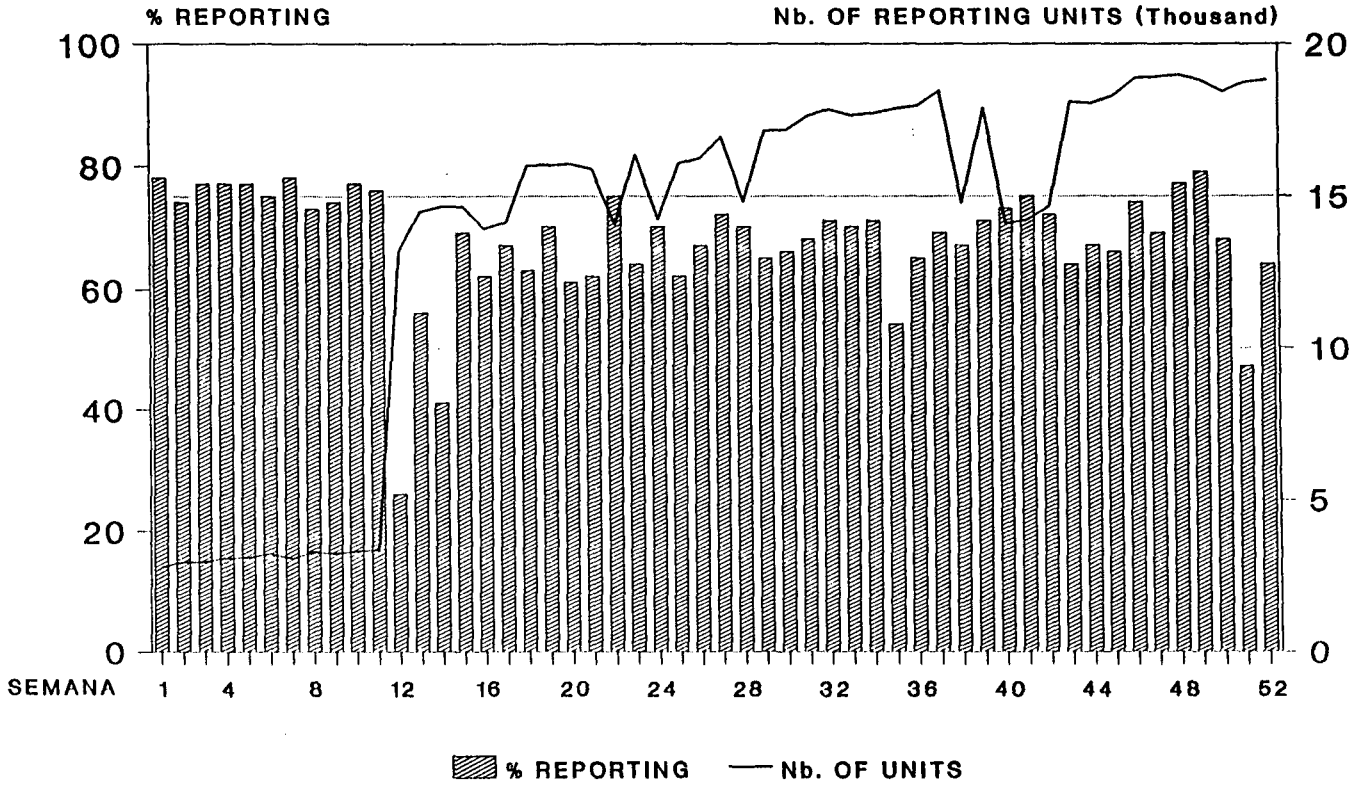


	1985	1986	1987	1988	1989	1990
REPORTED	1100	1550	1650	1960	2103	2572
CONFIRMED	800	1050	650	319	128	14

Note: In 1990, 67 cases were classified as compatible
Source: PESS/PAHO

Figure 3

ACUTE FLACCID PARALYSIS NEGATIVE REPORTING, LATIN AMERICA, 1990



SOURCE: PAHO

However, there are still problems that cause concern. Most critical is the quality of surveillance for wild poliovirus, now being accomplished through examination of stool samples of acute flaccid paralysis cases and their contacts. Progress in this activity is disappointing. Only 48% of all cases of acute flaccid paralysis reported during 1990 had two stool specimens properly and promptly collected and sent to the laboratory. This compares with a figure of 34% during 1989 (Figure 4). The early detection of acute flaccid paralysis could be improved by the dissemination of information about the reward of US$100.00 instituted by PAHO for reporting the first case of polio outbreak. The lack of laboratory information on such "compatible" cases undoubtedly results in failures to confirm a number of cases of acute flaccid paralysis caused by wild poliovirus. In such instances, the possibility of wild poliovirus transmission can not be ruled out and countries with such cases could not be certified as free of the wild poliovirus, even in the absence of "confirmed" poliomyelitis cases. Of particular concern are cases which are "lost to follow up," a number amounting to one third of the all cases during 1990.

Confirmation of cases through specimens obtained from contacts is proving to be most important. During 1990, one in four of the cases confirmed as due to wild poliovirus resulted from investigation of contact specimens. Considering that only one third of the cases had proper collection of specimens from contacts, there is cause for concern.

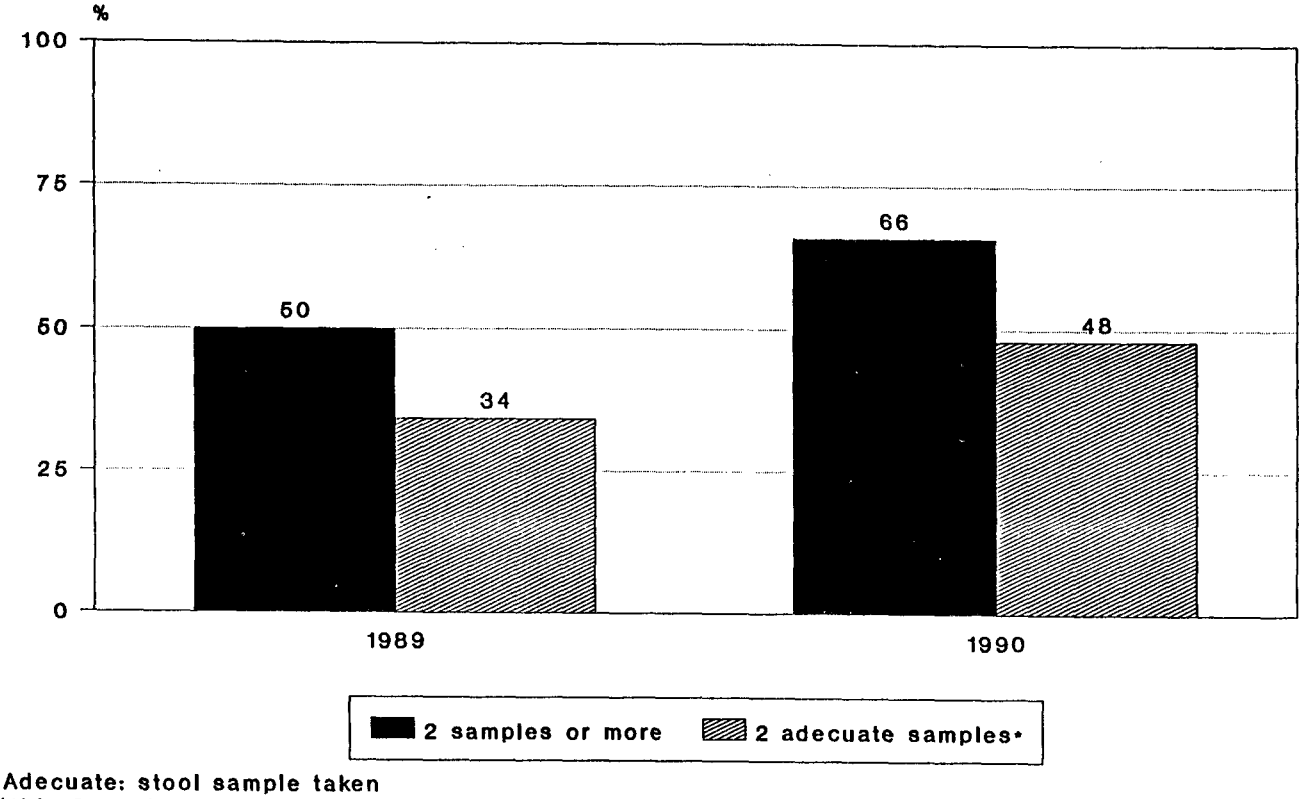
It is apparent also that special efforts are needed to assure that all available information is properly entered into the PAHO information system for all cases of acute flaccid paralysis. For example, only 44% of the cases were recorded as having a precise final diagnosis, and other variables, such as fever at onset of paralysis, showed data for only 45% of all cases.

The importance of careful monitoring of vaccine potency is well illustrated by the fact that 30% of the cases which occurred in the Americas over the last two years could be attributed to use of a substandard vaccine formulation by some countries.

Of highest priority is the elimination of what appears to be only a few remaining foci of wild poliovirus infection. The Andean countries are of special concern and demand urgent attention. A number of foci are undoubtedly present along both the Atlantic and Pacific coastal areas of Colombia. Neighboring areas of Venezuela and Ecuador are at special risk. Intensive measures are indicated, especially in Colombia where mop-up activities are more limited in intensity and scope than appears to be required.

Figure 4

% AFP ACCORDING TO CONDITION OF STOOLS LATIN AMERICA, 1989 - 1990



* Adecuate: stool sample taken within 2 weeks of onset of paralysis
Source: PESS/PAHO

Foci are also present in northern areas of Peru adjacent to Ecuador and could well be present in other parts of the country. Peru's present problems, involving both sociopolitical disturbances and a cholera epidemic, are recognized. Because of these problems, all possible assistance should be provided to strengthen their surveillance/containment/vaccination program. Overall, a special program (such as the one conducted in Central America late in 1990) encompassing Colombia, Peru, Ecuador, and neighboring areas of Venezuela appears to be needed.

The intensive efforts made in Mexico and Central America to eliminate infection appear to be progressing well, but a special alert and extraordinary measures will be required for the remainder of 1991, with a special focus in peri-urban areas and migrant groups.

All countries should continue their efforts to document surveillance and program activities of the type which will be needed for certification. It is clear that many countries will have to improve their surveillance indicators, especially the prompt collection of adequate specimens for the laboratory.

The use of immunization coverage data by county, and the striking improvements in surveillance of acute flaccid paralysis make clear the benefits that could be accrued to other elements of the overall immunization program, and potentially other primary health care interventions by this decentralized information system.

3. Neonatal Tetanus Elimination

In the period 1985 to 1990 there were between 1,100 to 1,400 cases of neonatal tetanus (NNT) reported annually in the Americas (Table 2). The 1990 data is still provisional and surveillance for neonatal tetanus is not yet fully developed, but preliminary information from studies that took place over the last three years and that were presented to the XXIII Pan American Sanitary Conference in September 1990 (Document CSP23/19, dated 24 July 1990), indicate that as many as 10,000 cases of this disease could be occurring every year in the Region of the Americas.

The PAHO approach to eliminate this disease by 1995 is to vaccinate all women of childbearing age in all those areas that are identified as at high risk for the disease. This strategy is based on the fact that the prevalence of the disease varies in the different geographical areas within a country. Surveillance should also be established to determine the magnitude of the problem in those areas that do not report cases and to evaluate the impact of the vaccination programs in those areas targeted for action. The vaccination activities are a complement to the improvement of prenatal care and of delivery

Table 2

REPORTED ANNUAL INCIDENCE OF NEONATAL TETANUS
AMERICAN REGION, 1985-1990

COUNTRIES	YEAR											
	1985		1986		1987		1988		1989		1990	
	CASES	RATE	CASES	RATE	CASES	RATE	CASES	RATE	CASES	RATE	CASES	RATE
BOLIVIA	9	0.03	39	0.17	89	0.34	90	0.34	104	0.40	55	0.25
COLOMBIA	252	0.30	211	0.26	203	0.24	162	0.22	164	0.19	162	0.18
ECUADOR	91	0.36	74	0.29	80	0.31	126	0.59	58	0.27	88	0.34
PERU	72	0.18	89	0.22	138	0.33	143	0.34	171	0.44	93	0.24
VENEZUELA	70	0.14	59	0.11	52	0.09	51	0.09	41	0.08	28	0.05
DOM. REP.	12	0.05	8	0.03	7	0.03	33	0.14	13	0.05	12	0.05
HAITI	57	0.28	57	0.28	75	0.35	63	0.29	40	0.19	40	0.19
MEXICO	...	...	57	0.02	84	0.03	108	0.05	87	0.04	123	0.06
EL SALV.	52	0.32	39	0.21	26	0.14	33	0.66	28	0.54	25	0.48
GUATEMALA	17	0.05	8	0.02	24	0.08	29	0.10	113	0.38	50	0.16
HONDURAS	20	0.10	24	0.14	21	0.12	4	0.02	20	0.11	39	0.23
NICARAGUA	30	0.27	28	0.22	32	0.24	26	0.17	17	0.10	15	0.09
PANAMA	12	0.16	12	0.16	7	0.09	7	0.09	7	0.09	5	0.06
ARGENTINA	19	0.02	18	0.02	13	0.01	14	0.01	18	0.02	14	0.01
PARAGUAY	76	0.69	59	0.52	59	0.51	54	0.46	37	0.30	38	0.30
BRAZIL	609	0.13	497	0.12	464	0.11	403	0.09	386	0.08	386	0.06 *
TOTAL	1398	0.12	1279	0.10	1374	0.11	1346	0.11	1293	0.10	1173	0.09

... Data not available

practices used both in formal as well as informal health services, including the participation of traditional birth attendants in vaccination and surveillance activities.

For operational and programmatic purposes, the countries of the Americas have been classified according to the prevalence of NNT and the activities that they are implementing:

a) Countries without NNT:

- Canada, Chile, Costa Rica, Cuba, English-speaking Caribbean countries, Suriname, Uruguay and the United States of America.

b) Countries with NNT:

- Reporting regularly: Bolivia, Colombia, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Peru and Venezuela. Some of these have initiated epidemiological investigation of NNT over the last two years. They are: Bolivia, Colombia, Dominican Republic, Ecuador, El Salvador, Honduras, Mexico, Nicaragua, Panama and Venezuela.

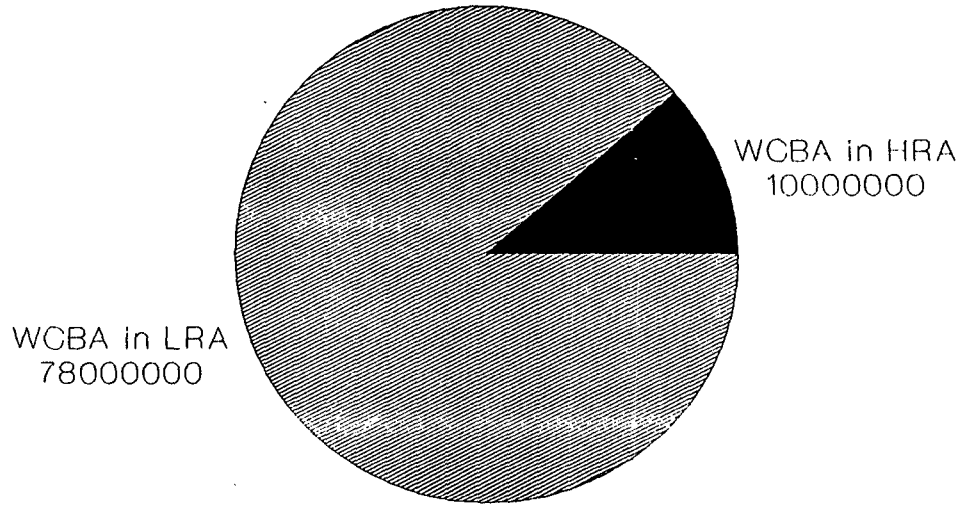
- Not reporting regularly: Argentina, Brazil, Haiti and Paraguay. Haiti does not have a national morbidity/mortality system for the disease, and Argentina does not differentiate between neonatal and post-neonatal tetanus in its system.

In the 16 countries with NNT, 277 million people (71% of the 390 million inhabitants) live in urban areas. It is estimated that there are approximately 12 million births every year, with birth rates that vary from 21:1,000 in Argentina to 42:1,000 in Bolivia. Women of childbearing age in these countries are estimated to be 22% of the general population, a total of 86 million women. These countries are divided into approximately 11,282 politico-administrative units that are identified as "municipio," district, or county, depending on the country being considered.

The studies conducted so far have identified that 57% of the cases of neonatal tetanus in the Americas occurred in only 5% of the total number of "municipios", districts or counties, where there are only 10 million of the total 86 million women of childbearing age that reside in these 16 countries (Figure 5). In other words, the vaccination of 10 million women of child-bearing age could prevent 57% of the cases of neonatal tetanus that are known to occur in the Americas during

Figure 5

Proportion of WCBA by Areas According to Risk. The Americas. 1990



Total of WCBA in 16 countries:88millions

WCBA: women of childbearing age;HRA: high risk areas; LRA: low risk areas;
(arch. ref. tnnamer5)

any given year. Almost half of the cases are occurring in urban areas, where the populations have better access to health services, both preventive as well as curative. It is concluded therefore that these women are not receiving good prenatal and delivery care. This fact is confirmed by the information that shows that 70% of the cases investigated were born to women who had never received any dose of tetanus toxoid.

Several countries have started control measures in the risk areas and preliminary information indicates that control of the disease could be achieved quite effectively. Figure 6 shows the decline in NNT cases in Santa Cruz de la Sierra, Bolivia, following the introduction of aggressive vaccination of women of child-bearing age, with the participation of traditional birth attendants in the process of vaccination.

4. Control of Measles

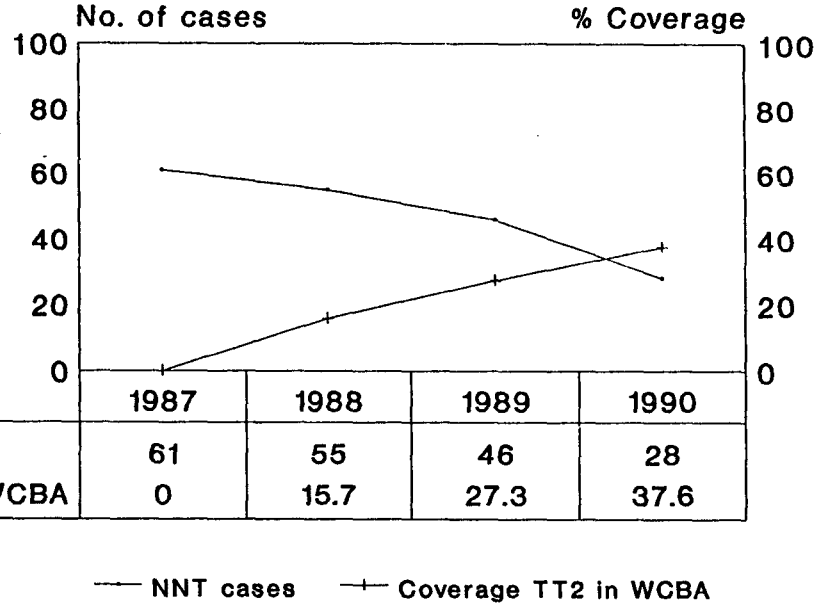
Before the introduction of measles vaccine in the Americas, the incidence of measles presented cyclic epidemic periods every two years. With the introduction of this vaccine in the late 1950's and its increased utilization by various countries, a marked reduction can be observed starting in 1963 (Figure 7).

Information on measles at national and regional level is frequently incomplete and does not represent the true epidemiological situation. However, even with these deficiencies it is possible to analyze the tendency of the disease and establish the best strategies for its control.

An average of over 600,000 cases were reported before the introduction of the vaccine in the Region of the Americas, with rates over 150 cases: 100,000 population. As the vaccine was introduced, a first level of decrease was observed in the mid-seventies, when an average of 300,000 cases was reported. With the implementation of EPI in the late seventies, a second level of decrease was observed, declining to 100,000 cases reported in 1989, a rate of 15 cases per 100,000 population. Thus, rates reported in the end of the 1980's represent only 10% of the rates reported 20 years earlier. Coverage rates for measles vaccine have increased from 30% in 1978 to over 70% in 1990, which caused changes in the epidemiology of the disease, particularly an increase in the interval between epidemic years. The recent outbreaks observed in several countries in the last two years is a consequence of this change in epidemiology of the disease and the accumulation of susceptibles after a lull period. The onset of these epidemics generates strong political and social pressure and many times is interpreted as failure of the program. Whenever this occurs, it is

Figure 6

Cases of NNT and Cumulative Coverage of TT2 in WCBA, Santa Cruz Urban Bolivia 1987 - 1990

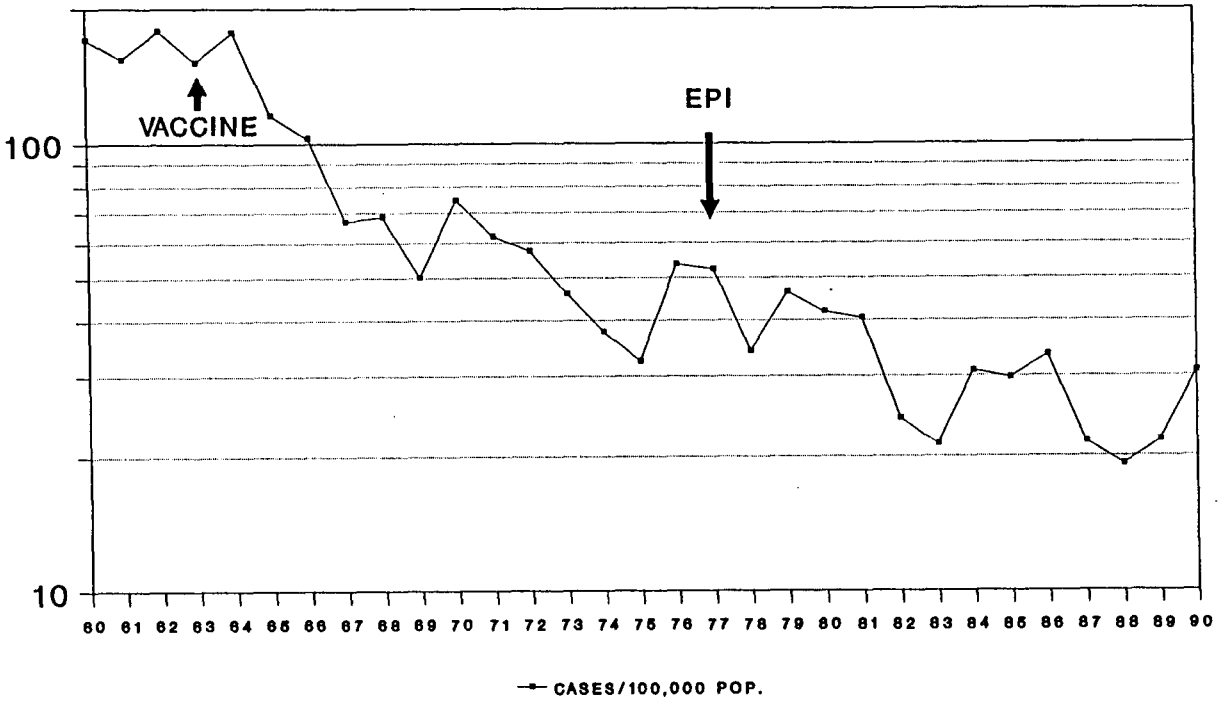


	1987	1988	1989	1990
NNT cases	61	55	46	28
Coverage TT2 in WCBA	0	15.7	27.3	37.6

Source: D.N.Epi. SCZ:Santa Cruz, Bolivia
WCBA:Women of childbearing age;
Pop. 128,430 WCBA. (arch. ref. wcbatt.)

Figure 7

MEASLES INCIDENCE RATES
AMERICAN REGION, 1960 - 1990*



SOURCE: PAHO
*PRELIMINARY DATA FOR 1990

important to stress the success of the program, because in spite of the epidemics, the total number of cases is always less than during the previous one. These findings are in general similar in all the subregions.

Based on these observations, and the analysis of the data, it is important to stress that the strategies for measles control will have to rely on two important components: a) achievement and maintenance of high immunization levels, which has to be accomplished by intensive vaccination through existing health services, complemented by national vaccination campaigns in those countries in which the infrastructure is not yet well developed; and b) intensive epidemiological surveillance to detect all suspect cases and the institution of appropriate control measures.

Utilizing these strategies, Cuba has reported no cases of measles since September 1990 and the English-speaking Caribbean is initiating its measles elimination activities in May 1991 with the vaccination of all children under 15 years of age, coupled with intensive surveillance activities. The experiences of Cuba and the English-speaking Caribbean will be critical for the development of the strategies that will eventually be used for the elimination of measles from the Americas.

5. Hepatitis B Control

Hepatitis B vaccination programs have been continued and amplified in high risk areas of Brazil, Colombia and Venezuela. In addition, vaccination programs have been initiated in several high hepatitis B virus-endemic areas in Peru, and prenatal screening of pregnant women with vaccination of children born to hepatitis B virus-carrier mothers has been started in Cuba and Honduras. Continued activities to control hepatitis B by integration of vaccination into national vaccination programs in areas with intermediate to high hepatitis B endemicity (carrier prevalence of 2% or greater) are encouraged. To facilitate these activities, efforts should be continued: a) to obtain reductions in vaccine price by collaboration with UNICEF and other procurement agencies; b) to conduct additional epidemiological studies, including serosurveys of pregnant women and other representative population groups, to identify intermediate and high hepatitis B virus endemic areas; and c) to use cost-effectiveness studies to determine the most effective strategies for hepatitis B vaccine delivery in the diverse areas of the Region.

II. PRIORITIES FOR ACTION

Several specific measures are necessary to achieve the goal set forth by the Governing Bodies of PAHO in relation to the control/elimination/eradication of diseases preventable by vaccination. The

most critical of these measures to be implemented over the next few months, and which will require a renewed commitment, are listed below.

1. Immunization Coverage

The strategies utilized so far have proven to be correct for increasing immunization coverage. Countries are therefore urged to continue implementing permanent vaccination activities throughout their health systems, complementating them with supplementary strategies such as national or district immunization days and outreach immunization activities in hard-to-reach areas. These activities are best implemented when aided by intense social mobilization and communications programs.

Monitoring of coverage by "municipio" or district is critical for the identification of those areas or pockets of low coverage. Resources should be reallocated to such areas for more intense activities. All countries should ensure that immunization coverage for all vaccines is monitored at these levels.

The majority of countries have conducted studies on missed opportunities for vaccination, which have been determined to be caused mainly by false contra-indications to vaccinations. Based on these observations, concrete efforts should be implemented to eliminate such missed opportunities. The experience of El Salvador and Bolivia with vaccination at hospital sites should be evaluated and the possibility of replication in other countries should be seriously considered. Additional operational research studies to determine the effectiveness of various strategies to reduce missed opportunities should be conducted.

As polio eradication becomes a reality, national immunization programs should use the experience gained to benefit the overall expansion of the infrastructure for surveillance and control of other preventable diseases. For example, mop-up operations could be used to increase coverage with all vaccines being used by the national program and institutional vaccination should gain particular attention.

2. Poliomyelitis Eradication

2.1 Vaccine

Countries must assure, at all times, that the vaccines being utilized in the program comply with the minimum potency requirements as recommended by PAHO and WHO: with a balance of 10:1:6 for types 1, 2, and 3, respectively. All countries producing vaccine should have batches of their vaccines tested in the PAHO/WHO reference laboratories.

2.2 Specimens

Additional efforts should be made in specimen collection. This is critical at this stage in the program. Only if specimens are promptly collected from cases and contacts will it be possible to determine that transmission of wild poliovirus has been interrupted. Two specimens containing an adequate quantity of stool material is required from each child with acute flaccid paralysis and a specimen from at least five contacts under five years of age. This implies seven stool specimens for each case. Because it is impossible to know which children may subsequently be lost to follow-up, it is critical that stool samples and clinical information be collected at the very first encounter. After collecting the specimens, they must be promptly refrigerated at 4°C or below and shipped to the laboratory in refrigerated containers, with sufficient ice so that it is still remaining at the time of receipt in the laboratory. It is therefore critical that epidemiologists and virologists coordinate shipment of specimens at all times.

2.3 Cases of Acute Flaccid Paralysis

Highest priority should be given to cases of acute flaccid paralysis in children under six years of age who experience fever at onset of paralysis and whose paralysis develops over a period of four days or less. Data show that such illnesses are most likely to be polio. Special efforts should be made to get samples from the patient and from contacts, and special mop-up vaccination programs should be started promptly. A special justification should be given for any cases of this type which are categorized as "discarded". Mop-up operations should be through two rounds of house-to-house vaccination with OPV, at least one month apart and covering a very wide geographic area, usually an entire province or state if wild poliovirus has been recently detected. Peri-urban areas and migrant groups continue to play the most important role in poliovirus transmission and should continue to be targeted for aggressive and extensive house-to-house vaccination.

All countries should publicize widely the reward of US$100 to anyone reporting the first case of an outbreak in which wild poliovirus is isolated.

In case of death, a definite diagnosis of polio can be made (or rejected) by examination of the spinal cord. It is important that a qualified and experienced pathologist examine such specimens, if available, and that a specimen be sent directly to a reference laboratory so that efforts can be made to grow the poliovirus.

A clinical review of cases of Guillain-Barre Syndrome (GBS) is not sufficient to differentiate poliomyelitis and GBS with certainty. Thus, it continues to be essential that GBS cases be considered as probable polio cases until all laboratory data are available and that a 60-day evaluation is conducted.

2.4 Reporting of Data

Information on all investigated cases must be available at country level, but such data must also be entered into the regional surveillance system to allow proper monitoring of regional progress towards eradication.

2.5 Environmental Sampling

The recommendations of the Report of the Consultation on Environmental Sampling and Testing Procedures for Wild Poliovirus should be promptly implemented in a coordinated effort of virologists, environmental engineers and epidemiologists, namely:

a) Sampling and testing procedures should be standardized.

b) Environmental sampling should begin at sites determined to be at highest risk for wild poliovirus transmission wherever cases have recently been reported (e.g. Andean subregion), and during the seasonal peak incidence.

c) These environmental studies should be related to isolation results from fecal specimens obtained from specially designed community surveys performed at the same time and site.

3. Neonatal Tetanus Elimination

All countries should establish a tetanus surveillance system to record separately neonatal and post-neonatal tetanus cases, as well as to investigate all neonatal tetanus cases and institute active search for such cases in health facilities, mainly hospitals.

Vaccinations should be concentrated among women of child-bearing age that live in the high risk areas and every contact with them should be used for vaccination. Prenatal and family planning programs should be used to reach such women.

Traditional birth attendants should be involved in tetamus vaccinations and surveillance activities for neonatal tetanus.

New, simple injection technologies should be applied to tetanus vaccination that could easily be used by lay personnel and introduced for routine use in national programs.

4. Control of Measles

In spite of increased overall vaccination coverage, measles outbreaks have continued to occur throughout the Region. This is due to

the fact that, except for Cuba, even those countries with the highest immunization coverage have not achieved levels that would ensure the elimination of transmission.

Special activities should be carried out to identify areas or pockets of low measles vaccination coverage for subsequent implementation of vaccination campaigns in those areas, in order to increase immunity levels.

Efforts carried out in Cuba and the measles elimination initiative in the Caribbean will permit the development of effective strategies aimed at controlling/eliminating the disease.

The low coverage rates that exist among priority groups continue to be the greatest impediments to the control of measles, and efforts at increasing coverage in the population under two years of age should be undertaken.

5. Hepatitis B Control

Countries that have areas or special populations with a high incidence of hepatitis B should make efforts to expand the use of hepatitis B vaccine in such areas and populations, taking into account the present high cost of the vaccine and the priority of this health problem compared with others.

III. PROGRESS TOWARDS PHASE II

The report presented by the Director to the XXIII Pan american Sanitary Conference (Document CSP23/19, dated 24 July 1990, and CSP23/19, ADD. 1 dated 14 September 1990) outlined in a Concept Paper the strategies for Phase II of an Accelerated Immunization Program in the Americas. This Concept Paper suggested that all the collaborating agencies that made possible the gains of Phase I continue working together and continue with additional funding to support national governments in implementing Phase II. At the moment PAHO is discussing the possibilities of new grants to support implementation of Phase II.

BIBLIOGRAPHY

1. Final Report of the IX Meting of the Technical Advisory Group (TAG), Guatemala City, Guatemala, 12-16 March, 1991.

2. Document CSP23/19 (Eng.), 24 July, 1990., and ADD. I (Eng.), 14 September, 1990.

3. Andrus, J.K., de Quadros, C.A. and Olive. J-M. Analysis of Sensitivity and Specificity of Operational Criteria for the Screening of Cases of Acute Flaccid Paralysis. Document EPI/TAG9/91-1, 1991.

4. Molinero, E., Duron, R. and Olive, J-M. Síndrome de Guillain-Barre: Estudio de 150 Casos en Niños Menores de 15 Años. Honduras, 1988-1990. Document EPI-TAG9-91-2. 1991

5. Olive, J-M., Castillo, C. and de Quadros, C.A. Oportunidades Perdidas de Vacunación en las Americas: Diagnóstico e Intervenciones. 1988-1990. Document EPI/TAG9/91-5. 1991.

6. De Quadros, C.A., Andrus, J.K, Olive, J-M. et al. The Eradication of Poliomyelitis: Progress in the Americas. In Printing. The Journal of Pediatric Infectious Diseases. 1991.

7. De Quadros, C.A. and Silveira, C. Neonatal Tetanus Control: Defining High Risk Areas. The Experience in the Americas. Document EPI/TAG8/90-7. 1990.

8. Final Report of the Informal Consultation on Environmental Sampling and Testing Procedures for Wild Poliovirus in the Americas. Washington, D.C. February, 1991.

9. Olive, J-M., de Quadros, C.A. and Castillo, C. Sarampión en las Américas. Revisión de la situación de los ultimos 30 años. Document EPI/TAG8/90-9. 1990.

10. EPI Newsletter, October 1990.

11. EPI Newsletter, December 1990.

12. EPI Newsletter, February 1991.

13. Resolution X of the XXIII Pan American Sanitary Conference. September, 1990.

14. Resolution XI of the XXXVI Meeting of the Directing Council of PAHO. September, 1989.

executive committee of
the directing council

PAN AMERICAN HEALTH ORGANIZATION

working party of
the regional committee

WORLD HEALTH ORGANIZATION

107th Meeting
Washington, D.C.
June 1991

Provisional Agenda Item 4.3

CE107/9, ADD. I (Eng.)
21 June 1991
ORIGINAL: ENGLISH

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

For the information of the Executive Committee, please find attached the most recent edition of the Weekly Bulletin on Polio Surveillance in the Americas (Vol. 6, No. 24, for the week ending 15 June 1991) (published in English only).

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

Vol. 6, No.24

Expanded Program on Immunization
Polio Surveillance in the Americas

Weekly Bulletin for the week ending 15 June 1991

Last wild poliovirus was detected on 25 February 1991, in Colombia

Table No. 1
Status of Analysis of Stool Samples, by Laboratory and Country,
Weeks 90/25 - 91/24

LAB.	CNTRY.	TOTAL *	RATE** per 100,000 <15 yrs	WITHOUT RESULTS			ENTEROVIRUS ISOLATION							
				Not yet in Lab	<10 wks	>10 wks	% ISOLATION	NEG.	OTHER ENTERO-VIRUS	CHARACTERIZATION Pending	Lab.	Vaccine	Wild P1	Wild P3
CAR	DOR	8	0.3	0	0	0	25.0	6	2	0	-----	0	0	0
	HAI	14	0.5	0	1	0	23.1	10	3	0	-----	0	0	0
	TRT	3	0.0	0	0	0	0.0	3	0	0	-----	0	0	0
FIO	BOL	53	1.7	11	7	6	48.3	15	5	1	FIO	8	0	0
	BRA	823	1.5	90	31	11	20.4	550	78	10	FIO	53	0	0
	PER	83	0.9	4	17	14	14.6	41	2	0	FIO	5	0	0
INC	COR	11	1.0	0	0	0	27.3	8	3	0	-----	0	0	0
	ELS	90	3.8	7	7	0	48.7	39	27	2	CDC	8	0	0
	GUT	102	2.4	1	4	0	36.1	62	31	0	CDC	2	0	2
	HON	61	2.7	0	6	0	41.8	32	21	2	-----	0	0	0
	NIC	16	0.9	1	3	0	25.0	9	3	0	-----	0	0	0
	PAN	5	0.6	0	0	0	20.0	4	1	0	-----	0	0	0
INH	VEN	101	1.3	4	10	0	24.1	66	17	1	CDC	3	0	0
INS	COL	138	1.2	4	10	0	29.8	87	22	9	CDC	1	5	0
	ECU	44	1.0	3	5	1	25.7	26	9	0	-----	0	0	0
LSP	MEX	272	1.0	1	12	0	26.6	190	60	4	CDC	0	0	5
MAL	ARG	91	0.9	0	10	3	19.2	63	9	2	MAL	4	0	0
	CHI	1	0.0	0	0	0	100.0	0	0	0	MAL	1	0	0
	PAR	30	1.8	3	7	4	18.8	13	3	0	-----	0	0	0
	URU	3	0.3	0	1	1	0.0	1	0	0	-----	0	0	0
TOTAL		1949	1.3	129	131	40	24.1	1225	296	31		85	5	7

** POPULATION UNDER 15 YEARS OF AGE

* EACH SAMPLE RELATES TO AN INDIVIDUAL

STATUS OF POLIOVIRUS PENDING INTRATYPIC DIFFERENTIATION
Weeks 90/25 - 91/24

LAB	COUNTRY	POLIOVIRUS NOT YET IN LAB				POLIOVIRUS IN LAB < 4 Wks				POLIOVIRUS IN LAB > 4 Wks				TOTAL
		P1	P2	P3	MIX	P1	P2	P3	MIX	P1	P2	P3	MIX	
CDC	COL	2	0	3	2	0	1	1	0	0	0	0	0	9
	ELS	1	0	0	0	0	0	0	0	0	0	1	0	2
	HON	1	0	0	0	0	0	0	0	1	0	0	0	2
	MEX	1	0	1	0	0	0	0	0	0	1	0	1	4
	VEN	0	1	0	0	0	0	0	0	0	0	0	0	1
FIO	BOL	1	0	0	0	0	0	0	0	0	0	0	0	1
	BRA	2	0	0	5	0	0	0	0	2	1	0	0	10
L	ARG	0	0	2	0	0	0	0	0	0	0	0	0	2
TOTAL		8	1	6	7	0	1	1	0	3	2	1	1	31

Table No. 3
WILD POLIOVIRUS ISOLATED
Weeks 90/24 - 91/23

SITE COUNTRY	SITE STATE	VIRUS TYPE	DATE OF COLLECTION	WK
Colombia	Atlantico	P1	09/22/90	38
	Magdalena	P1	11/20/90	47
	Magdalena	P1	12/29/90	52
	Bolivar	P1	01/08/91	02
	Bolivar	P1	02/25/91	09
Guatemala	Chimaltenango	P3	09/20/90	38
	San Juan Saca.	P3	10/02/90	40
Mexico	Colima	P3	09/10/90	37
	Colima	P3	09/24/90	39
	Colima	P3	09/25/90	39
	Jalisco	P3	10/23/90	43
Peru	Amazonas	P1	10/11/90	41

Table No. 4
CONFIRMED CASES OF POLIOMYELITIS
BY WEEK OF ONSET

SITE	TOTAL 1990	CUMULATIVE 1990	CUMULATIVE 1991
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	4	1	2
COR	0	0	0
CUB	0	0	0
DOR	0	0	0
ECU	1	1	0
ELS	0	0	0
GUT	3	1	0
HAI	0	0	0
HON	0	0	0
MEX	7	2	0
NIC	0	0	0
PAN	0	0	0
PAR	0	0	0
PER	2	2	0
URU	0	0	0
USA	0	0	0
VEN	0	0	0
TOTAL	17	7	2

Table No. 5
POLIO COMPATIBLE CASES
BY WEEK OF ONSET

SITE	TOTAL 1990	CUMULATIVE 1990	CUMULATIVE 1991
ARG	0	0	0
BOL	0	0	0
BRA	14	4	2
CAN	0	0	0
CAR	0	0	0
CHI	0	0	0
COL	8	3	0
COR	0	0	0
CUB	0	0	0
DOR	0	0	0
ECU	2	2	0
ELS	2	0	0
GUT	0	0	1
HAI	0	0	0
HON	0	0	0
MEX	7	3	1
NIC	0	0	0
PAN	0	0	0
PAR	2	2	0
PER	17	5	0
URU	0	0	0
USA	0	0	0
VEN	8	2	0
TOTAL	60	21	4

Table No. 6
CASES OF ACUTE FLACCID PARALYSIS UNDER INVESTIGATION
BY WEEK OF REPORT

SITE	TOTAL 1990	CUM 1991	WEEKS 1- 4	5- 8	9-12	13-16	17-20	21	22	23	24
ARG	20	29	7	4	3	6	3	3	1	2	0
BOL	0	8	0	0	1	0	2	2	1	2	0
BRA	1	203	8	11	21	50	73	9	15	11	5
CAN	0	0	0	0	0	0	0	0	0	0	0
CAR	7	0	0	0	0	0	0	0	0	0	0
CHI	0	21	1	0	1	3	6	2	5	2	1
COL	2	41	0	2	10	14	11	3	1	0	0
COR	0	2	0	0	0	2	0	0	0	NR	0
CUB	1	4	0	1	2	1	0	0	0	0	NR
DOR	0	0	0	0	0	0	0	0	0	0	0
ECU	11	19	2	1	3	5	1	3	2	2	0
ELS	2	27	0	2	1	7	6	5	2	3	1
GUT	0	15	0	1	0	0	6	4	0	2	2
HAI	0	7	0	0	1	1	4	0	0	1	0
HON	0	8	0	0	2	3	3	0	0	0	NR
MEX	0	60	0	4	9	12	25	1	5	2	2
NIC	0	5	0	0	0	0	4	0	0	1	0
PAN	3	3	0	1	1	0	1	0	0	0	0
PAR	0	18	0	5	4	5	2	1	0	0	1
PER	0	12	0	0	1	3	3	1	1	3	0
URU	0	2	0	0	1	0	0	0	1	0	0
USA	0	0	0	0	0	0	0	0	0	0	0
VEN	12	38	3	5	4	8	9	3	2	2	2
TOTAL	59	523	22	37	65	120	159	37	36	33	14

CAR INCLUDES REPORTS FROM ALL CAREC-MEMBER COUNTRIES
NR NO REPORT RECEIVED

directing council | *regional committee*

PAN AMERICAN HEALTH ORGANIZATION

WORLD HEALTH ORGANIZATION

XXXV Meeting

XLIII Meeting

Washington, D.C.
September 1991

Provisional Agenda Item 5.3

CD35/15, ADD. I (Eng.)
16 September 1991
ORIGINAL: ENGLISH

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

Update on Polio Surveillance

As of week 36, ending 7 September 1991, only four isolates of wild poliovirus have been detected in the entire Western Hemisphere: three in Colombia, Departments of Bolivar and Atlantico, and one in Peru, Department of Piura. The last isolate was detected on 19 March 1991 in Atlantico, Colombia (see the Weekly Bulletin on Poliovirus Surveillance, Vol. 6, No. 36, for the week ending 7 September 1991, annexed).

Interagency Support

The Pan American Health Organization (PAHO) and the United States Agency for International Development (USAID) signed an agreement on 10 July 1991, by which the USAID grants US$20 million to PAHO over the period 1991-1995 for implementation of the acceleration of the Expanded Program on Immunization (EPI), consolidation of poliomyelitis eradication, elimination of neonatal tetanus and further control of measles. This agreement was signed in response to Resolution CSP23.R10 of the XXIII Pan American Sanitary Conference, held in Washington, D.C., September 1990.

Annex

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

Vol. 6, No.36

Expanded Program on Immunization
Polio Surveillance in the Americas

Weekly Bulletin for the week ending 7 September 1991

Poliovirus Surveillance

Last wild poliovirus was detected on 19 March 1991, in Colombia

Table No. 1
Status of Analysis of Stool Samples, by Laboratory and Country,
Last 52 Weeks (90/37 - 91/36)

LAB.	CNTRY.	TOTAL *	WITHOUT RESULTS			ENTEROVIRUS ISOLATION							
			Not yet in Lab	<10 wks	>10 wks	% ISOLATION	NEG.	OTHER ENTERO-VIRUS	CHARACTERIZATION Pending	Lab.	Vaccine	Wild P1	Wild P3
CAR	DOR	5	0	0	0	20.0	4	1	0	-----	0	0	0
	HAI	18	0	0	0	16.7	15	3	0	-----	0	0	0
FIO	BOL	62	14	1	11	41.7	21	4	1	FIO	10	0	0
	BRA	840	44	66	17	17.0	592	59	14	FIO	48	0	0
	PER	95	13	7	22	24.5	40	4	1	FIO	6	2	0
INC	COR	5	0	0	0	20.0	4	1	0	-----	0	0	0
	ELS	83	1	2	1	53.2	37	32	1	CDC	9	0	0
	GUT	94	0	9	0	36.5	54	25	0	CDC	4	0	2
	HON	58	2	0	0	41.1	33	18	0	CDC	4	0	0
										INC	1	0	0
	NIC	11	0	0	0	63.6	4	6	0	CDC	1	0	0
	PAN	3	0	0	0	33.3	2	1	0	-----	0	0	0
INH	VEN	85	5	4	2	21.6	58	12	3	CDC	1	0	0
INS	COL	134	5	6	1	29.5	86	22	7	CDC	1	6	0
	ECU	44	4	5	0	25.7	26	9	0	-----	0	0	0
LSP	MEX	244	0	6	1	24.1	180	45	1	CDC	6	0	5
MAL	ARG	81	0	3	2	28.9	54	12	1	MAL	9	0	0
	CHI	1	0	0	0	100.0	0	0	0	MAL	1	0	0
	PAR	25	0	0	2	56.5	10	12	0	MAL	1	0	0
	URU	3	0	0	1	50.0	1	1	0	-----	0	0	0
TOTAL		1891	88	109	60	25.3	1221	267	29		102	8	7

* Each sample relates to an individual

Table No. 2
STATUS OF POLIOVIRUS PENDING INTRATYPIC DIFFERENTIATION
Last 52 Weeks (90/37 - 91/36)

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
CDC	COL	1	1	0	0	2	0	1	0	1	0	0	1	7
	ELS	1	0	0	0	0	0	0	0	0	0	0	0	1
	MEX	0	0	0	0	0	0	0	0	0	0	1	0	1
	VEN	0	1	1	0	0	0	1	0	0	0	0	0	3
FIO	BOL	1	0	0	0	0	0	0	0	0	0	0	0	1
	BRA	6	1	1	3	0	0	0	0	3	0	0	0	14
	PER	0	0	0	1	0	0	0	0	0	0	0	0	1
MAL	ARG	0	0	0	0	1	0	0	0	0	0	0	0	1
TOTAL		9	3	2	4	3	0	2	0	4	0	1	1	29

Table No. 3 - WILD POLIOVIRUS
Last 52 Weeks (90/37 - 91/36)

SITE COUNTRY	SITE STATE	VIRUS TYPE	DATE OF COLLECTION	WK
Colombia	Atlantico	P1	09/22/90	38
	Magdalena	P1	11/20/90	47
	Magdalena	P1	12/29/90	52
Guatemala	Chimaltenango	P3	09/20/90	38
	San Juan Saca.	P3	10/02/90	40
Mexico	Colima	P3	09/10/90	37
	Colima	P3	09/24/90	39
	Colima	P3	09/25/90	39
	Jalisco	P3	10/22/90	43
	Jalisco	P3	10/23/90	43
Peru	Amazonas	P1	10/11/90	41
Colombia	Bolivar	P1	01/08/91	02
	Bolivar	P1	02/25/91	09
	Atlantico	P1	03/19/91	12
Peru	Piura	P1	02/02/91	05

Vol. 6, No. 36

Expanded Program on Immunization
Polio Surveillance in the Americas

Weekly Bulletin for the
week ending 7 September 1991

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 1990	TOTAL RATE 1990	CUMULATIVE CASES 1991	CUMULATIVE RATE 1991*
ARG	111	1.11	54	0.78
BOL	59	1.84	42	1.90
BRA	904	1.66	612	1.62
CAN	0	0.00	0	0.00
CAR	10	0.32	8	0.37
CHI	181	4.31	109	3.75
COL	207	1.75	103	1.26
COR	10	0.91	3	0.39
CUB	24	0.92	8	0.44
DOR	12	0.43	10	0.52
ECU	61	1.39	39	1.28
ELS	88	3.67	59	3.55
GUT	105	2.50	65	2.24
HAI	23	0.88	16	0.89
HON	69	3.00	30	1.88
MEX	340	1.19	235	1.19
NIC	17	0.94	16	1.28
PAN	9	1.00	4	0.64
PAR	33	1.94	21	1.78
PER	101	1.13	61	0.99
URU	6	0.67	3	0.48
USA	0	0.00	0	0.00
VEN	126	1.64	67	1.26
TOTAL	2496	1.12	1565	1.02

* ADJUSTED

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

SITE	TOTAL 1990	CUM 1991	WEEKS 1- 4	5- 8	9-12	13-16	17-20	21-24	25-28	29-32	33	34	35	36
ARG	0	31	1	3	0	1	1	3	6	9	1	2	2	2
BOL	0	6	0	0	0	0	0	0	0	3	0	0	3	0
BRA	0	235	3	1	5	9	22	21	37	61	7	17	23	29
CAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CAR	0	8	1	0	0	0	0	1	1	5	0	0	0	0
CHI	0	26	1	0	0	0	1	5	15	1	0	2	1	0
COL	0	53	0	1	1	9	8	7	12	7	4	1	1	2
COR	0	3	0	0	0	2	0	0	1	0	0	0	NR	NR
CUB	0	4	0	0	0	0	1	2	1	0	0	0	NR	NR
DOR	0	1	0	0	0	0	0	0	1	0	0	0	0	0
ECU	0	27	1	1	3	4	1	4	1	7	2	0	2	1
ELS	1	13	0	0	0	0	1	2	1	7	0	2	0	0
GUT	0	24	0	0	0	0	1	2	4	8	6	1	1	1
HAI	3	9	0	0	1	1	2	1	3	1	0	0	0	0
HON	0	9	0	0	0	0	0	1	6	2	0	0	0	0
MEX	0	94	0	3	2	4	18	13	29	18	3	2	2	NR
NIC	0	3	0	0	0	0	0	0	0	1	0	0	0	2
PAN	1	2	0	0	0	0	1	0	1	0	0	0	0	0
PAR	0	4	0	0	0	0	1	2	0	0	0	0	0	1
PER	0	15	0	0	1	0	1	1	1	5	0	2	1	3
URU	0	2	0	0	0	0	0	1	0	1	0	0	0	
USA	0	0	0	0	0	0	0	0	0	0	0	0	0	
VEN	0	30	0	2	0	1	2	3	7	7	3	1	4	
TOTAL	5	599	7	11	13	31	61	69	127	143	26	30	40	41

NR NO REPORT RECEIVED

Table No. 3
CONFIRMED CASES OF POLIOMYELITIS BY WEEK OF ONSET

SITE	TOTAL 1990	CUMULATIVE 1990	CUMULATIVE 1991
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	4	1	3
COR	0	0	0
CUB	0	0	0
DOR	0	0	0
ECU	1	1	0
ELS	0	0	0
GUT	3	1	0
HAI	0	0	0
HON	0	0	0
MEX	7	3	0
NIC	0	0	0
PAN	0	0	0
PAR	0	0	0
PER	3	2	0
URU	0	0	0
USA	0	0	0
VEN	0	0	0
TOTAL	18	8	3

Table No. 4
POLIO COMPATIBLE CASES BY WEEK OF ONSET

SITE	TOTAL 1990	CUMULATIVE 1990	CUMULATIVE 1991
ARG	9	3	2
BOL	0	0	0
BRA	14	10	6
CAN	0	0	0
CAR	0	0	0
CHI	0	0	0
COL	11	4	3
COR	0	0	0
CUB	0	0	0
DOR	0	0	0
ECU	2	2	1
ELS	2	0	0
GUT	0	0	1
HAI	0	0	0
HON	0	0	0
MEX	7	5	1
NIC	0	0	0
PAN	0	0	0
PAR	2	2	0
PER	16	12	0
URU	0	0	0
USA	0	0	0
VEN	10	8	3
TOTAL	73	46	17

CAR INCLUDES REPORTS FROM ALL CAREC MEMBER COUNTRIES

directing council | *regional committee*

PAN AMERICAN HEALTH ORGANIZATION

WORLD HEALTH ORGANIZATION

XXXV Meeting

XLIII Meeting

Washington, D.C.
September 1991

Provisional Agenda Item 5.3

CD35/15, ADD. II (Eng.)
19 September 1991
ORIGINAL: ENGLISH

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

Vaccine Supply for the Expanded Program on Immunization

Immunization coverage in the Region of the Americas, as shown in the Progress Report of the Director, has reached an all time high of over 75% for each of the vaccines included in the Program (DPT, polio, measles and BCG). Utilization of tetanus toxoid for women of childbearing age has started in those areas of highest risk for neonatal tetanus.

At the global level, including all other WHO Regions, immunization coverage levels also achieved very high levels, and new targets for the control of vaccine-preventable diseases have been set. Among these, and following the lead of the Americas, there is the global target of eradication of poliomyelitis by the year 2000, the elimination of neonatal tetanus by 1995, and reduction of measles morbidity and mortality by 90% by the year 2000. The achievement of these high levels of immunization coverage throughout the world implies increased demand for all vaccines used in the EPI, with subsequent pressure on the supply of vaccines. The achievement of these targets of disease eradication, elimination and control will increase enormously the demand for vaccines because the immunization strategies have to be adapted to the achievement of the goals. For example, the eradication of polio is achieved through mass campaigns aimed at all children under five years of age, twice a year, plus mop-up operations of house-to-house vaccination in all areas where the poliovirus may be circulating, until transmission is interrupted. For those countries that aim at the interruption of measles transmission, also, mass campaigns are necessary, usually of all children under 15 years of age, regardless of previous vaccination status. The elimination of neonatal tetanus will entail the vaccination of all women of childbearing age in those areas where the disease is endemic. These strategies will increase the demand for vaccines as never before, stretching present manufacturing capabilities.

On the other side, and a very important factor in the manufacture of vaccines, over the last three years two EPI vaccines, measles and oral poliomyelitis, were reformulated, with increased concentration of viruses, which placed an additional burden on production capacity. Quality control mechanisms have been stressed and in many instances vaccines could not be used in the national programs. Traditional Eastern European suppliers of many African and Eastern European countries either stopped production or stopped supplying vaccines to those customers, which then had to turn to Western suppliers.

The Region of the Americas is the most advanced in the strategies to eradicate, control and eliminate the diseases preventable by vaccination, as shown in the report of the Director. Polio is on the verge of being eradicated, all areas at risk for neonatal tetanus have been identified, and control measures have been initiated. Several countries, including Cuba, the English-speaking Caribbean and most recently Brazil, have initiated campaigns to eliminate measles transmission, and it is expected that other countries may follow the same strategies in the future. Therefore, in this Region the first signs of vaccine shortage are beginning to arise, as illustrated by recent shortages of measles and polio vaccines, slowing down operations at country level. Similar shortages of tetanus toxoid are expected as control activities are accelerated. Another sign of the shortage of vaccines is the sharp increase of prices already being experienced, which presents an additional obstacle to the development of the programs.

It is therefore of utmost urgency that the issue of vaccine supply be addressed, both regionally and globally, in order that present production capabilities can be increased and new alternatives for vaccine production explored, with the aim of avoiding shortage of the vaccines as the countries aim at maintaining or further increasing immunization coverage and further controlling or eliminating the diseases included in the program. For the Region of the Americas, the final goal should be complete regional self-sufficiency in the areas of vaccine production and quality control.