EPI Newsletter

Expanded Program on Immunization in the Americas

Volume XXV, Number 6 **IMMUNIZE AND PROTECT YOUR CHILDREN** December 2003

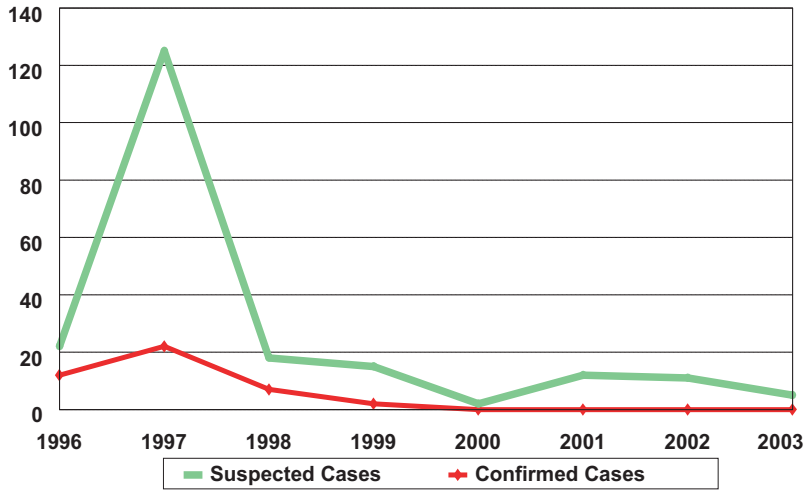
Caribbean EPI Managers' Meeting, 17-20 November 2003

The 20th Meeting of the Caribbean EPI Managers was held in Curaçao, Netherlands Antilles, from 17-20 November 2003. The meeting brought together over 60 health officials from 25 countries of the English-speaking Caribbean, Suriname, the Netherlands Antilles, Aruba, the French Departments of Guadeloupe, Martinique and French Guiana, the United States and the US Virgin Islands, Canada, and the United Kingdom. Several Netherlands Antilles Representatives were present. PAHO Immunization staff and consultants, as well as staff from the Caribbean Epidemiology Center (CAREC) and the Caribbean Program Coordination Office (CPC) also attended.

Achievements in the Sub-Region

Control of vaccine-preventable diseases remains exemplary in the countries of the sub-Region, and all should be congratulated on their efforts. No measles cases were confirmed up to week 43 2003 despite careful surveillance, and there were no confirmed rubella cases for 2002 and 2003 to date (see Figure 1). The last case of CRS occurred in 1999 in Suriname.

Figure 1. Reported Suspected and Confirmed Cases of CRS English-Speaking Caribbean & Suriname, 1996-2003*



Source: MOH Reports to EPI-CAREC

*Week 43

More than 90% of the countries in the sub-Region are providing a two-dose MMR strategy. Those countries must measure coverage of each dose and calculate the number of children who have received two doses, one dose, or no doses of vaccine. Coverage for the second dose of MMR must be 95% or greater to prevent the accumulation of susceptibles. If there are significant numbers of susceptible children who have not been protected by the second dose, then a further catch-up campaign must be conducted. For both measles and rubella, importation still remains the greatest risk for re-emergence.

Seventeen of 21 countries have completed and submitted laboratory inventories, and only one laboratory (CAREC) holds material potentially infectious for wild polioviruses. AFP rates have remained constant and there has been improvement in indicators such as timeliness and completeness of specimen collection. These improvements must be maintained.

Challenges

Integrated measles and rubella surveillance must be strengthened, especially for women who acquire rubella in pregnancy. The proportion of clinical specimens that were received within 5 days is still very low and must be improved (see Figure 2). If the first specimen is taken within the first three days of the appearance of rash in a pregnant woman or is collected from cases in clusters of fever/rash, and is negative by IgM testing, second specimens should be obtained.

Each specimen sent for measles and rubella IgM testing must have an epidemiologic case identification number. Evaluation reveals that some countries have no funding or mechanism in place for in-country transportation of specimens. Every effort is being made to encourage countries to ship specimens to the CAREC laboratory as quickly as possible and have in-

In this issue:

Objectives of the Meeting

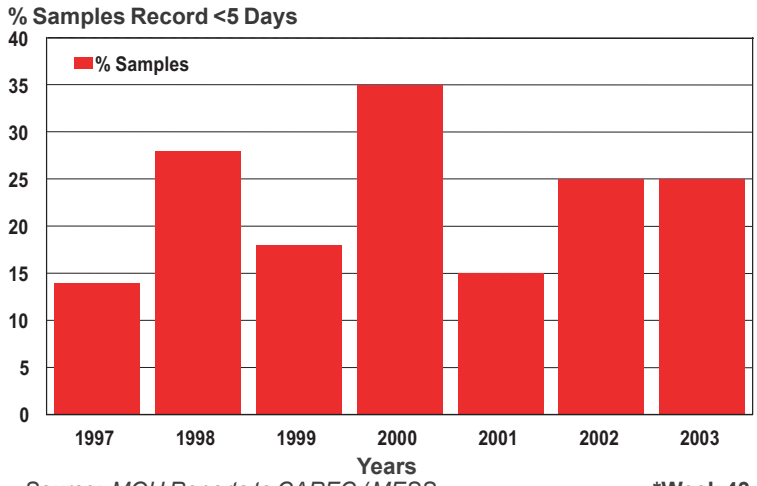
In addition to EPI program reviews and development of annual work plans for the year 2004 by each country, the main objectives of the meeting included:

- Analyzing the status of measles eradication with emphasis on follow-up campaign activities and integrated fever/rash surveillance system;
- Evaluating the status of rubella/CRS elimination in the countries;
- Setting the targets and objectives of each country with respect to immunization coverage and reduction of morbidity and mortality from EPI diseases for the year 2004;
- Sustaining the eradication of wild poliovirus in each country;
- Analyzing the status of the EPI in each country;
- Discussing status/improvement of surveillance of adverse reactions, Hepatitis B, and *Haemophilus influenzae* type b infections;
- Developing country action plans with specific budgets for each activity in order to achieve the targets and objectives set for 2004;
- Discussing the status of implementation of the Invasive Bacterial Infections Surveillance (IBIS) system in selected countries; and
- Updating information on selective scientific topics of common interest, including immunization, service delivery, and surveillance of measles/rubella and other EPI diseases.

country mechanisms for specimen transportation. Molecular typing of rubella virus isolates will facilitate better understanding of the source of rubella outbreaks, CRS cases, and rubella strain variations. To date, few virologic specimens are submitted for molecular typing. Countries embarking on rubella elimination must document strains to determine whether cases are indigenous or imported.

The IBIS system implemented in five countries –Barbados, Guyana, Jamaica, St.-Vincent, and Trinidad-and-Tobago– requires additional technical support to be sustainable.

Figure 2. Percentage of Samples received in CAREC Laboratory <5 Days after being taken, 1997-2003* English-Speaking Caribbean and Suriname



Source: MOH Reports to CAREC / MESS *Week 43

The immunization programs in the Caribbean are facing major challenges in achieving and sustaining high vaccination coverage in a climate of reform and economic difficulties in the health sector. In larger countries, overall immunization coverage needs to be increased. In addition, pockets of low immunization coverage exist in some countries. In addition, governments must ensure that invoices for vaccine supplies are paid in a timely fashion (i.e. within 60 days). Failure to pay for supplies jeopardizes maintenance of routine immunization and may lead to widespread rather than localized shortages.

Conclusions

Effective management and supervision of the implementation of EPI Plans of Action in each country remain the backbone of the Caribbean program. The EPI Managers participating in this meeting should be congratulated for their tireless efforts to reach all children and protect them from vaccine-preventable diseases. At the same time, governments must continue to keep immunization high on their list of priorities.

Evaluating Coverage Data in Bolivia: A Guarantee of Equity and Social Justice

Background

Bolivia is located in the center of South America and is politically divided into nine Departments; each Department is subdivided into provinces and then into municipalities. According to the last census conducted during 2002, Bolivia has 8,274,325 inhabitants and registers persistently high rates of neonatal mortality and morbidity in both rural and urban areas throughout the country and a weak network of health systems.

Over the last several years, immunization coverage rates have increased in a sustainable fashion in Bolivia and have reached >80% at the national level. Consequently, the Expanded Program on Immunization (EPI) in Bolivia is now broadening the analysis of immunization coverage data. To determine with certainty whether coverage rates in the country are sufficiently high to ensure universal coverage, an analysis was conducted using a multi-step methodology. This meth-

odology helps promote equity and social justice by including populations in the poorest and most remote municipalities.

Methodology

The immunization data (number of doses and coverage) used in this analysis were obtained primarily from the National Health Information System (Sistema Nacional de Información en Salud - SNIS), which is the official source of health information in Bolivia. Official population denominators generated by the National Statistics Institute (INE) were also used, as well as information generated by the EPI in Bolivia regarding supervision, rapid coverage monitoring, and active search at the institutional and community levels.

The analysis was divided into four steps:

- Analysis of population denominators;
- Analysis of immunization coverage;
- Data consistency (analysis): Looking at the total number of doses administered, the study of municipalities according to their number of inhabitants, immunization coverage in health services, and drop-out rates; and,
- Review of results from the main tools available for EPI management support.

Results

1. Population Denominator Analysis:

Because the official population figures used to estimate immunization coverage are not linked to the population growth rate nor to the population age structure, population denominators are inconsistent (Table 1). Until 2002, these population data were official projections based on the 1992 National Census. The 2002 census showed that these projections did not, however, correspond to the reality. In the last five years before the 2002 census, population figures were overestimated. National level data from the 2002 census are officially reliable, but may not be reliable at the municipality level, where in many cases the population data appear to be overestimated. Adjustments were made for 2004 that have further distorted this denominator and the situation repeats itself at the municipal level.

Table 1. Population aged <1 year and 1 year
Bolivia, 1998-2004

Year	Population aged <1 year	Population aged 1 year
1998	247,883	240,135
1999	249,619	242,369
2000	251,349	244,605
2001	249,898	243,133
2002	211,361	218,884
2003	217,232	224,965
2004	255,655	250,951

Source: INE

2. Immunization Coverage Rates Analysis:

For the years 2001-2002, Departmental coverage rates with measles, mumps, and rubella (MMR) vaccine exceeded 100% for children aged 12-23 months in eight of nine Departments in the country (Table 2), highlighting the inaccuracy of population estimates in the denominators. However, over one-third of the country's municipalities did not reach adequate coverage (Table 3). This discrepancy is due to the fact that municipalities with coverage over 100% account for 73% of the total number of municipalities. On the other hand, 36% of municipalities with coverage <95% contain just 20% of the children aged 12-23 months in the country.

Table 2. MMR coverage
Bolivia, 2002

Department	Doses administered	Coverage (%)
La Paz	59,008	106.3
Cochabamba	48,933	124.9
Santa Cruz	57,798	101.2
Oruro	10,684	116.7
Potosí	21,579	109.9
Tarija	9,804	97.0
Chuquisaca	16,969	109.8
Beni	11,669	106.5

Table 3. Number of municipalities by MMR coverage
Bolivia, 2002

Coverage (%)	No. of municipalities (%)
<60	11 (3.5%)
60 – 79	34 (10.8%)
80 – 94	70 (22.2%)
≥95	200 (63.5%)
Total	**315**

The national coverage for pentavalent vaccine in 2002 was 93%, with rates by Departments ranging from 81% to 117%. At the national level, 5% of children live in municipalities with pentavalent coverage <80%. In some Departments the percentage of children living in municipalities with pentavalent vaccine coverage <80% is higher, such as Beni (25%) and Pando (53%).

3. Data Consistency Analysis:

A municipality is considered at-risk if it has coverage <80% with 3 doses of pentavalent vaccine and <95% coverage with MMR vaccine. It is important to note that 49% of the total population of the country is concentrated in just 10 municipalities and, in 2002, none of these municipalities were considered high risk. The distribution of municipalities according to population size showed that 170 (54%) of the 315 total municipalities had <10,000 inhabitants and, among those municipalities, 44 (75%) were at-risk. This finding explains the coexistence of high national coverage rates and the persistence of at-risk municipalities. It is worth mentioning that although 112 municipalities are still at risk, the national coverage rate could reach 95%, since hypothetically coverage could reach 100% in the rest of municipalities. This fact is concerning because children living in at-risk municipalities have the same rights as those living in large municipalities with access to the health services network; thus coverage levels should not be substantially different in these at-risk municipalities if indeed the EPI is achieving equity in the provision of immunization services.

The number of pentavalent and MMR doses administered progressively increased during 1998-2001 and then slightly decreased in 2002 (Table 4). This finding corroborates the shortcomings of the denominator but also reflects the sustained immunization activities conducted in Bolivia. While vaccine coverage has been declining, the number of doses administered has been increasing. Coverage rates for vaccines administered in health facilities have remained steady since 1998, ranging between 51% in 1999 and 60% in 2002. Drop-out rates decreased from 13% to 7% during 1998-2001. Currently, all of the Departments have drop-out rates <10%, with the exception of Santa Cruz (11.6%).

Table 4. MMR and Pentavalent coverage and doses administered - Bolivia, 1998-2002

Year	Pentavalent		MMR	
	Doses	Coverage	Doses	Coverage
1998	190.568	76.9	240.068	139.0
1999	217.104	87.0	242.305	142.8
2000	223.723	89.0	244.580	123.7
2001	231.572	92.1	244.589	108.8
2002	220.049	104.1	218.884	108.9

4. Review of EPI Management Tools Results:
Primary support tools for EPI management include rapid coverage monitoring (RCM), supervisory visits, and active search at both the institutional and community levels. From January through September 2003, RCM was performed in 180 (57%) municipalities. RCM was conducted in 79% of the high-risk municipalities in the country. This practice allows for adjustments and the implementation of immunization activities where results do not meet expectations. This RCM is not, however, an immunization coverage survey, so its results cannot be generalized to the rest of the area or locality. Nevertheless, it provides very useful information to assess the quality of immunization activities conducted in a small area.

An adequate tool exists for supervision and a copy was available in all facilities. In 2003, supervision activities were conducted in 64% of municipalities (i.e. 29% of the country's facilities). Supervisory visits were conducted in 80% of high-risk municipalities.

A methodology for information quality control has been developed in Bolivia. After a thorough review of primary registries (registry books), indicators such as concordance, percent of relative difference, and percent of absolute difference are reviewed to assess the quality of immunization data and information sent to the next level. This methodology is used by the nurses of the EPI in parallel to regular supervision activities.

Conclusions

Overall immunization coverage in Bolivia is high and has been rising over the past several years. All of the Departments have vaccine coverage higher than 80%. However, these data must be interpreted taking into account the likelihood of overestimates of population size, particularly at the municipality level. In almost all Departments, coverage rates at the national and municipal levels are consistent. Similarly, coverage rates and decreasing drop-out rates are consistent in 8 of 9 Departments. While coverage rates are high at the national level, there are still 112 municipalities at risk containing 18% of the children in the country aged 1 year, and special efforts must be made to reach these areas with vaccination services. The number of vaccine doses applied in health facilities has been steadily increasing, which demonstrates the sustained immunization activities conducted in Bolivia over the past several years.

Recommendations

To improve and guarantee consistency of information related to immunization coverage, the following general control activities are recommended:

- Maintain rapid coverage monitoring, especially in high-risk areas.
- Maintain general supervision, emphasizing the most problematic areas.
- Apply simultaneous quality control of the information using existing tools.
- Plan interventions in at-risk municipalities after reviewing the results provided by the application of the methodology described in this article. Information analysis is not an end in itself but a means for appropriate public health decision-making.

The following more specific recommendations are being taken into account as a result of this analysis:

- Perform a monthly analysis of the EPI data with all coverage indicators (see shaded box).
- Provide an updated vaccine monitoring graph to all immunization facilities in the country.

Formulas for Calculation of EPI Coverage Indicators	
Drop-Out Rate	[(1st dose PENTA – 3rd dose PENTA) / 1st dose PENTA] * 100
Accessibility Indicator	(1st dose PENTA / <1 year population)
Integrality Indicator	[(OPV3 – PENTA3) / OPV3] * 100
Coverage Indicators	(OPV3 <1 year population * 100 / <1 year population) (PENTA3 <1 year population * 100 / <1 year population) (BCG <1 year population * 100 / <1 year population) (MMR 1 year population * 100 / 1 year population)

- Train teams from the network management so they perform all the supervision tasks.
- Develop, at the Departmental EPI level, a follow-up plan for network management for the application of all EPI control methodologies.
- Intensify activities with all antigens in municipalities with insufficient coverage.
- Include representatives of social networks in meetings for information analysis.
- Conduct coverage monitoring in at-risk areas or areas where the coverage indicator's quality is questionable.
- Implement "case studies" in municipalities with population denominator problems to identify migration flows and vaccinate children of other municipalities, for example on market days.

Through the systematic use of the strategies reviewed above, universal vaccination can be achieved in Bolivia, with an emphasis on at-risk areas, while achieving equity and social justice for all children in the country.

Summary of EPI Evaluation of Nicaragua, November 2003

Introduction

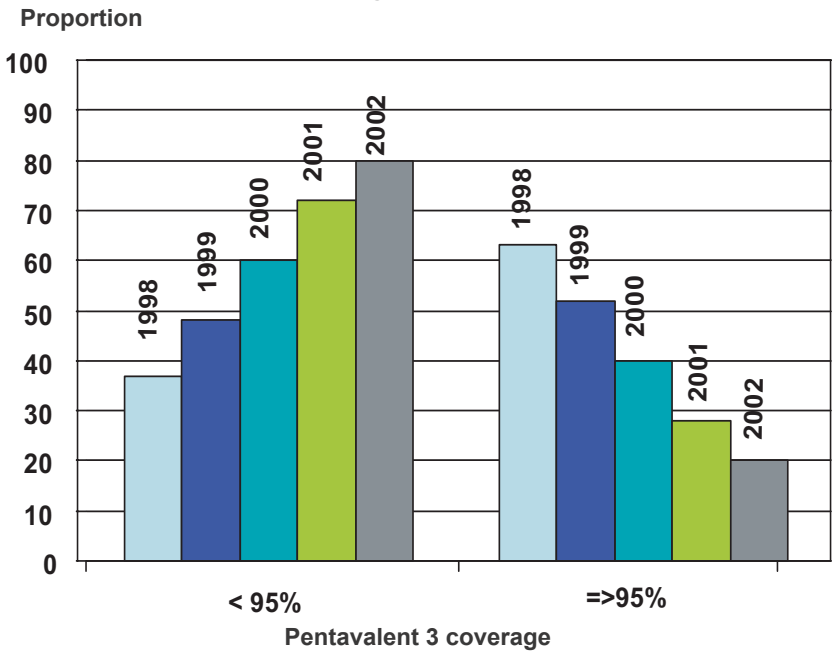
The international evaluation of the National Immunization Program (NIP) of Nicaragua was conducted during 17–29 November 2003. Seven international experts and 12 professionals from the Ministry of Health participated. The objective of the evaluation was to assess the current program situation, primarily regarding program efficiency in its mission to protect the community. The evaluation identified strengths and weaknesses of the program, particularly factors preventing achievement of its objectives. The evaluation also included a component to evaluate the satisfaction level among the program's users.

Background

Nicaragua is divided into three regions: Pacific, Atlantic, and Central. The estimated population in 2000 was 5,710,670, with 58.2% of the total population living in the Pacific Region where population density is the highest. Children aged 0-4 years make up 16% of the total population. An estimated 40% of the internal migrants live in Managua. Women aged 15-29 years make up the predominant group migrating from rural to urban areas. Emigration and internal migration are demographic phenomena that produce a strong economic impact in the country. It is estimated that 20-25% of all Nicaraguans live outside of the country, primarily in the U.S. and Costa Rica.

The NIP in Nicaragua was established in 1980. National coverage levels quickly rose close to 90% for all antigens during the last five years. The NIP has achieved polio eradication, measles elimination, and the elimination of neonatal tetanus as a public health problem. Nicaragua was one of the first countries to introduce new vaccines, such as MMR and pentavalent, and has one of the most modern cold chains on the continent. Important efforts are underway to assure the sustainability of the NIP, which currently receives support from international cooperation. Recent studies indicate that the country has not yet reached the goal of ≥95% coverage in all municipalities, and as a result the NIP has strengthened its efforts at the operational level. One immediate goal is to decentralize programmatic goals to the population at the local and municipal levels.

Figure 1. Municipalities by coverage with 3 doses of Pentavalent Nicaragua, 1998-2002



Source: National Immunization Program Information System, MINSA, Nicaragua.

Methodology

Twenty-two municipalities were evaluated in five Departments: León, Chontales, Managua, Región Autónoma Atlántico Sur (RAAS), and Jinotega. Interviews were conducted with 453 individuals (both health workers and users), and 55 health facilities were visited.

A qualitative assessment was conducted through interviews with key individuals at political, managerial, and operational levels, and from government institutions, international organizations, non-governmental organizations, cooperation agencies, diplomats and program users. The main program components reviewed were:

- Organization/coordination/planning,
- Biologicals, cold chain and logistics,
- Training and supervision,

- Epidemiologic surveillance, and
- Information system.

Sites visited were selected by considering:

- Reporting rates of vaccine-preventable diseases,
- Proportion of municipalities with low coverage within the SILAIS (Sistemas Locales de Atención Integral a la Salud-Local Systems for Integrated Health Services),
- 2002 immunization coverage,
- Coverage trends per biological during recent years,
- Results of the 1998 and 2001 Demographics and Health Surveys (ENDESA),
- Poverty indicators,
- Health services coverage and accessibility, and
- Opinions of individuals knowledgeable about the country's epidemiological and social situation.

Accordingly, 22 of the country's 152 municipalities were selected. These municipalities contain 47% of the country's total population. Five interview teams, each composed of one international evaluator and at least one national evaluator, visited the selected municipalities. SILAIS personnel later were added to reinforce the teams. All interviews were done by international evaluators. Surveys were conducted at political, managerial, and operational levels as well as among program users. Data gathered during field trips were analyzed and presented by working groups. These data were also consolidated on the basis of the different program components.

Results

The results of the evaluation presented to the national authorities can be summarized as follows:

- The NIP has a broad social base and strong community participation. There is a high level of political commitment. It should be noted that close to 95% of mothers interviewed considered the immunization card to be an essential document worth safekeeping and believed that immunization is important.
- The high coverage levels registered have begun to decrease. The number of municipalities with coverage levels <95% for DPT3/Pentavalent3 has been increasing over the last five years (Figure 1).
- Approximately 30% of vaccines are administered during the Jornadas Nacionales de Salud (National Health Days, NHDs). It is clear that routine immunization must be strengthened and the NHDs maintained. This will allow the country to avoid a drop in immunization coverage, maintain the achievements obtained (polio eradication, measles and neonatal tetanus elimination), and reach new objectives (rubella and congenital rubella syndrome elimination), while bringing immunization and integrated health activities to at-risk municipalities and populations.
- The evaluation team observed that on occasion children and mothers are requested to be registered in prevention programs before being vaccinated. This situation may cause lost opportunities since some mothers, due to limited time or for personal reasons, visit health facilities specifically for vaccination services. At times, the additional services offered are sometimes not available or are not provided efficiently.

Conclusions

The NIP of Nicaragua has been able to achieve high vaccination coverage, adequate epidemiologic surveillance, and high prestige in the community. The results of this evaluation suggest that to maintain these achievements, it will be necessary for the program to take new measures, especially those designed to guarantee equity in the delivery of vaccination and other health services to populations in high risk districts.

Paraguay passes Vaccine Law

Background

During the international evaluation of the Expanded Program on Immunization (EPI) of Paraguay conducted by PAHO in December 1999, it was recommended that the country pass a vaccine law to guarantee the continuity of budgetary resources earmarked exclusively for vaccine procurement financing and benefit the program's target populations. That same year, PAHO and the Ministry of Health joined forces with the parliament to make this recommendation become a reality.

Throughout 2000, PAHO shared its technical expertise with the Ministry of Health and the House of Representatives to draft a vaccine bill. The bill was designed with one objective: To ensure the financial sustainability of the immunization program, especially when introducing new vaccines. In parallel to these efforts, the Senate bicameral commission on budget was approached. It immediately authorized the addition to the national budget of the resources needed to introduce the pentavalent and measles/mump/rubella (MMR) vaccines by 2002.

For over a year, the bill languished, mainly due to internal political conflicts. In August 2003, after the opening of the new legislative session, a working group composed of both Ministry of Health and PAHO members met with the Commission on Health of the House of Representatives in order to revive and revise the bill. The commission opened consultations to review its content, which was modified and expanded. It now encompasses not only the availability of vaccines included in the official immunization schedule, but also the development of financial mechanisms to guarantee that the target population be reached, the requirement of a vaccination card when registering births and entering the private or public school systems, and the future introduction of new vaccines.

On 21 August 2003, a representative from the Commission on Health presented the bill to the full assembly of the House of Representatives. It was approved unanimously and later ratified by the Senate on 6 November 2003. Twelve days later, the President of the Republic of Paraguay and the Minister of Health and Social Welfare signed the bill, making it an official law of the Republic (see page 8). This was a momentous achievement for the National Immunization Program of Paraguay and a major step towards reducing inequities in immunization.

Annual Summary of Polio and Measles Indicators - 2003

AFP Surveillance Indicators (Period between epidemiological weeks 02 to 53, 2003)

SITE	TOTAL 2002		Last 52 weeks (2003/02-2003/53)				
	Cases	Rate	Cases	Rate	% Inv. <48 hours	% 1 Sample *	% Sites reporting
Argentina	129	1.19	114	1.03	81	65	88
Bolivia	64	1.95	57	1.69	98	74	0
Brazil	636	1.23	414	0.80	97	74	92
Canada	NR	NR	NR	NR	NR	NR	NR
CAREC	22	1.00	32	1.45	94	63	100
Chile	114	2.64	79	1.83	84	84	97
Colombia	121	0.86	144	1.03	67	72	86
Costa Rica	29	2.38	0	0.00	0	0	0
Cuba	37	0.83	21	0.47	100	100	96
Dominican Republic	36	1.12	16	0.47	100	94	89
Ecuador	43	1.00	41	0.95	80	95	86
El Salvador	110	4.82	99	4.30	90	87	79
Guatemala	72	1.58	101	2.22	93	89	52
Haiti	12	0.38	11	0.34	73	73	40
Honduras	72	2.95	51	1.87	98	96	94
Mexico	384	1.18	334	1.02	93	83	91
Nicaragua	28	1.25	34	1.49	94	97	100
Panama	4	0.41	7	0.75	100	57	85
Paraguay	27	1.21	22	0.99	59	77	89
Peru	111	1.29	94	1.09	97	96	99
Uruguay	8	0.98	9	1.10	78	44	42
USA	NR	NR	NR	NR	NR	NR	NR
Venezuela	106	1.39	89	1.17	96	89	81
TOTAL ♦	2165	1.30	1769	1.05	90	81	90

* Taken within 14 days of onset of paralysis

♦ Excluding Canada and USA

NR: No report received

Measles Surveillance Indicators (Period between epidemiological weeks 01 to 53, 2003)

Country	% Sites reporting Weekly	% Cases with adequate Investigation	% Cases with adequate Sample	% Lab. received <=5 days	% Lab. Result <=4 days	% Cases discarded by Lab.	Number of active Municipalities
Argentina	93	21	85	69	85	100	0
Bolivia	...	99	99	80	76	92	0
Brazil	82	85	70	61	80	89	1
Canada	...	...	...	...	...	...	...
CAREC	100	99	95	23	100	99	0
Chile	98	62	92	77	96	99	0
Colombia	88	53	95	68	81	98	0
Costa Rica	...	...	...	...	...	...	1
Cuba	96	100	100	...	...	93	0
Dominican Republic	89	100	98	44	94	100	0
Ecuador	89	45	99	86	90	99	0
El Salvador	80	53	95	79	86	98	0
French Guiana	...	...	...	...	...	100	0
Guadeloupe	...	...	...	...	...	...	0
Guatemala	48	97	99	66	94	99	0
Haiti	...	82	91	95	71	95	0
Honduras	94	94	100	75	93	100	0
Martinique	...	...	...	...	...	...	0
Mexico	89	98	99	82	54	100	3
Nicaragua	100	86	99	84	77	100	0
Panama	86	86	98	75	99	99	0
Paraguay	89	62	100	88	100	100	0
Peru	99	95	96	67	88	91	0
Puerto Rico	...	...	...	...	...	...	0
Uruguay	28	100	100	100	0	...	0
USA	...	...	...	...	...	...	...
Venezuela	81	97	99	67	74	100	0
TOTAL AND AVERAGE	87	85	80	63	73	99	5

... : No report received

Source: PESS and MESS, PAHO

LEGISLATIVE AUTHORITY
ACT N° 2,310
PROTECTING CHILDREN AGAINST VACCINE-PREVENTABLE DISEASES
THE CONGRESS OF THE PARAGUAYAN NATION ADOPTS WITH THE FORCE OF LAW

Article 1. - The object of the present Act is the adequate protection of children against vaccine-preventable diseases. To this end, the Executive Branch, through the Ministry of Public Health and Social Welfare, shall have the necessary resources available in the National Budget for the procurement and free and effective administration of the vaccines included in the Expanded Program on Immunization (EPI) and new vaccines recommended by the World Health Organization (WHO).

Article 2. – The Legislative Branch shall annually allocate sufficient resources in the National Budget to finance the cost of the complete vaccination schedule through a special line item.

The following vaccines shall be covered within the regular series: Regular EPI Program: BCG (tuberculosis); DPT (diphtheria, pertussis, and tetanus); OPV (polio); Td (tetanus and diphtheria); MMR (measles, mumps, and rubella); *Haemophilus influenza* type b; and hepatitis B.

Article 3. -

1.- Every child has the right to receive free of charge and in a timely manner the vaccines specified in Article 2 of this Act.

2.- Parents have the obligation to ensure that their children receive the complete vaccination schedule.

3.- Every woman of childbearing age has the right to receive free of charge and in a timely manner the Td vaccination against tetanus and diphtheria.

Article 4. - The Ministry of Finance shall set up a special account in the name of Ministry of Public Health and Social Welfare–Expanded Program on Immunization (EPI), and annually, during the month of March at the latest, shall transfer to it all resources earmarked for this purpose in the budget.

These funds shall come from Source 10 and may not be utilized for purposes other than those stipulated in this Act, nor can they be reduced or encumbered for any reason whatsoever. Likewise, all donations made to the State for this purpose shall be transferred to that account.

Article 5. - The present Act shall go into effect on its promulgation, and the Executive Branch shall allocate the necessary resources in the National Budget to ensure compliance in the next fiscal year.

Article 6. – Presentation of the vaccination card shall be mandatory for registering children in the Civil Registry and enrolling them in public and private schools, where proof must be presented that they have received all vaccines required according to their age. Should the institutions mentioned in the present Article discover a failure to comply with this Act, they must inform the Ministry of Public Health and Social Welfare, which shall take the necessary steps to correct the omission.

Article 7. - Communicate to the Executive Branch.

Bill passed by the Honorable Chamber of Deputies, on the twenty-first day of August, two thousand and three, and by the Honorable Senate, on the sixth day of November, two thousand and three, being duly authorized by Article 204 of the National Constitution.

Asunción, 18 November 2003

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

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