

Abstracts and Reports

POLIOMYELITIS IN THE AMERICAS, 1969-1984

The Expanded Program on Immunization (EPI) has made major advances since it was launched in the Americas in 1977. Immunization coverage approximately doubled between 1977 and 1984; and, as a consequence, the incidence of the six EPI diseases (measles, poliomyelitis, tuberculosis, diphtheria, tetanus, and pertussis) has been greatly reduced. These achievements have been particularly dramatic in the case of polio.

From 1969 through 1984 a total of 53,251 poliomyelitis cases were reported in the Americas. In the early years of this period (from 1969 through 1977), an average of 4,274 cases were reported annually; in 1981-1983 the annual average was considerably lower (1,115 cases); and in 1984 only 525 cases were reported (Table 1).

Because of incomplete reporting in some countries, these figures may not represent all of the cases that actually occurred. However, the downward trend is clearly evident, even though progressively improved reporting systems have

brought larger proportions of existing cases to the attention of public health authorities in recent years. All subregions in the Americas have shown a decline in the incidence of reported polio cases since the EPI was launched in 1977.

A breakdown of reported cases by country is shown in Table 2. Almost all countries have made notable progress in bringing polio under control. Between 1975-1977 and 1984 there was a tenfold reduction in the average number of polio cases reported annually, and the number of countries in the Americas reporting cases dropped from 19 to 11.

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

Table 1. The average numbers of poliomyelitis cases reported annually in the Americas, by geographic subregion, in various periods before and after EPI implementation, and the percentage change compared to the earliest period.

Region	Pre-EPI implementation (1969-1977)	Stage 1 post-EPI (1978-1980)		Stage 2 post-EPI (1981-1983)		Stage 3 post-EPI (1984)	
	No. of cases (annual avg.)	No. of cases (annual avg.)	Change	No. of cases (annual avg.)	Change	No. of cases	Change
<i>Northern America:</i>	20	23	15%	9	-55%	8	-60%
<i>Middle America:</i>							
"Continental" ^a	1,062	1,140	7%	473	-55%	312	-71%
Caribbean	29	1	-97%	19	-34%	0	-100%
<i>South America:</i>							
Tropical	3,011	2,465	-18%	599	-80%	205	-93%
Temperate	151	22	-85%	14	-91%	0	-100%
Total	4,274	3,651	-15%	1,115	-74%	525	-88%

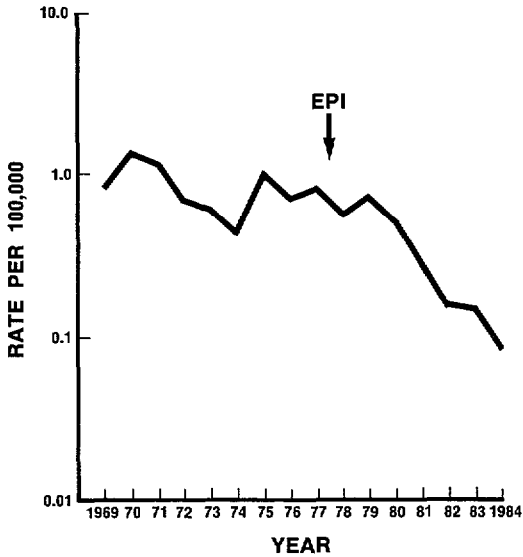
^aIncludes the Dominican Republic and Haiti.

Table 2. The number of poliomyelitis cases reported in the Americas, by country, 1975-1984.

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

^a— No cases reported.

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



This high degree of polio control can be credited primarily to steadily increasing vaccination coverage of the target populations. The use of special immunization tactics, such as national vaccination days scheduled two or three times a year, has contributed significantly to this increased vaccination coverage. Overall, data from reporting countries indicate that the proportion of children under one year old in the Americas who received three doses of polio vaccine increased from about 34% in 1978 to 78% in 1984 (Table 4).

Table 3. Countries in the Americas having reported poliomyelitis incidences of less than 0.1 cases per 100,000 population for five or more years as of 1984.

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

In the 1970s, program success was measured in terms of the number of countries that had achieved the Ten-Year Health Plan goal of reducing the poliomyelitis incidence to less than 0.1 case per 100,000 population. From here on, however, success will be measured by the absence of any disease cases due to wild poliovirus, because the high vaccination coverages already achieved in the Americas have made it feasible to think in terms of eradication. (For a more detailed account of the current campaign against poliomyelitis, see "PAHO Director announces campaign to eradicate poliomyelitis from the Americas by 1990" that appeared in our second 1985 issue.¹)

Source: Pan American Health Organization, Poliomyelitis in the Americas, 1985, *EPI Newsletter* 7(3):3-6, 1985.

¹Pan American Health Organization, *Bull Pan Am Health Organ* 19(2):213-215, 1985.

MALARIA CHEMOPROPHYLAXIS PROBLEMS AMONG TRAVELLERS TO ENDEMIC AREAS

A recent report of six deaths from severe cutaneous reactions among travellers from the United States who were taking sulfadoxine/pyrimethamine (Fansidar®) with chloroquine

for chemoprophylaxis of *Plasmodium falciparum* infections once again confirms that no drug regimen is entirely satisfactory for the prevention of malaria. (The general subject of malaria