experience needed to establish effective national programs.

4. To give leadership in developing the tools for surveillance, monitoring and evaluation of programs for prevention of NCDs.

5. To provide leadership and assistance to the Member Countries in meeting the spectrum of training needs, including highly specialized personnel who need fundamental knowledge and skills in this area as well as various categories of health personnel who require less intensive training programs.

(Source: Based on the report of the PAHO Advisory Group on Health Promotion and Prevention of Non-Communicable Diseases. Health of Adults Program, PAHO.)

---

**Brazilian Purpuric Fever**

Brazilian purpuric fever (BPF) is a life-threatening pediatric infection that is preceded by conjunctivitis and caused by a specific strain of *Haemophilus influenzae* biogroup aegyptius (BPF clone) (1-4). BPF was recognized during 1984 in the state of São Paulo, Brazil, when 10 children in a town of 20,000 persons died of an acute febrile illness associated with purpura and vascular collapse (5,6). Although the etiology could not be determined at the time of the outbreak, the epidemiologic investigation indicated the disease was associated with purulent conjunctivitis. Surveillance for BPF identified other cases, including an outbreak of 17 cases in 1984 in a town in the neighboring state of Paraná; 12 sporadic cases in early 1985 and a cluster of 8 cases in February 1986 in São Paulo State. In March 1986 an outbreak of purulent conjunctivitis occurred in Serrana, São Paulo State with 10 culture confirmed cases, and four deaths.

In December 1989 two definite cases of BPF were identified in two cities in Mato Grosso State (the first time outside of São Paulo and neighboring southern state of Paraná.)

In the first case, *H. influenzae* biogroup aegyptius was isolated by blood culture from a clinically ill child; in the second, a definite case of BPF was clinically diagnosed. In addition, from August through October 1989, three possible BPF cases occurred in Mato Grosso.

In January 1990, the Mato Grosso State Department of Health (MGSDH) distributed information about BPF to all hospitals and clinics in the state and conducted an educational seminar on BPF for physicians and public health workers. Health professionals were encouraged to report all suspected BPF cases to the MGSDH.

By April 1990, 26 cases (including the two definite and three possible cases identified in December) that were believed to be either definite or possible BPF had been reported. Of these, 10 cases (from six widely separated cities) were confirmed: three as definite and seven as possible BPF.

The overall attack rate for the combined population of the six cities was six per 100,000 children <10 years of age. Six of the 10 children classified as definite or possible BPF died; another suffered autoamputation of portions of distal toes and fingers following septic shock.

The 16 other cases could not be confirmed as either definite or possible; however, at least some of these cases are believed to have been BPF because 1) no other cause of illness was identified and 2) the BPF clone was isolated on conjunctival culture from two of the children who could not be classified as having either definite or possible BPF but who where hospitalized with an acute febrile illness.

It is unknown whether BPF occurs in areas other than central and southern Brazil. In many areas blood cultures may not be drawn for cases treated for presumed meningococcal meningitis. The occurrence of cases in areas separated by 500 miles suggests the potential for spread.

During the epidemiologic investigation of BPF in Mato Grosso, a randomized study was conducted to compare the efficacy of topical chloramphenicol with that of oral rifampin for conjunctival eradication of the BPF clone among children with BPF clone conjunctivitis. The results of this study suggest that oral rifampin is substantially more effective (7). Because the development of the BPF may be related to conjunctival carriage of the BPF clone, oral rifampin may be useful for prevention of BPF among children with BPF clone conjunctivitis. In São Paulo and Mato Grosso, some children with conjunctivitis who have been exposed to a suspected case of BPF are being treated with oral rifampin (20 mg/kg/day for 4 days).
The occurrence of BPF in Mato Grosso and the continued occurrence of BPF in São Paulo emphasize the need for improved understanding of the epidemiology and pathogenesis of BPF to enable the development of effective methods for its control and prevention.

References


(Source: Adapted from Centers for Disease Control. Brazilian Purpuric Fever - Mato Grosso, Brazil. *MMWR* 39: 903-905, 1990.)

### Eradicating Indigenous Transmission of Wild Poliovirus in the Americas. An Update

In 1985, the Pan American Health Organization (PAHO) established a plan for eradicating the indigenous transmission of wild poliovirus from the Region of the Americas by the end of 1990. In response to this initiative, PAHO's Expanded Program on Immunization (EPI) implemented a program strategy that included (1) achievement and maintenance of high poliomyelitis immunization levels through accelerated immunization efforts, including national immunization days held twice a year at least 4 weeks apart; (2) surveillance to detect all new cases of acute flaccid paralysis (AFP); and (3) a rapid vigorous response, including containment measures to all new cases of paralysis.

Since 1985 rates of reported paralytic poliomyelitis in the Americas have declined substantially from the 930 cases confirmed in 1986 to 130 cases in 1989. During this same period oral poliovirus vaccine coverage with three doses, in children by 1 year of age increased from a 70% in 1985 to an estimated 87% in 1990.

At present the surveillance of paralytic poliomyelitis has shifted to focus on the surveillance of wild poliovirus.

As of 20 December 1990 only 10 wild polioviruses had been isolated from patients with acute flaccid paralysis: four type 3 from western Mexico, three type 3 from Guatemala, and three type 1 from the northern Andean subregion (Ecuador, Colombia and Peru). The last isolate so far has been from Guatemala (25 September 1990).

In July 1990, the International Certification Commission of Poliomyelitis Eradication in the Americas, convened by PAHO, met for the first time to develop the methodology to certify countries that are polio-free. Although the criteria are not finalized, many of the same indicators that PAHO uses to evaluate progress towards polio eradication efforts will be used by the Commission. The burden of diagnosis and, ultimately, the proof that eradication of transmission of wild poliovirus has been achieved rests with the laboratories. Accordingly, countries need to continue to investigate properly all cases of AFP, and stool specimens obtained from these individuals and their contacts must be submitted to the laboratory in adequate condition.

(Source: Expanded Program on Immunization, Maternal and Child Health Program, PAHO.)