

PERSPECTIVES

Pax Polio

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Our dictionary defines millennium both as a period of a thousand years and as "a hoped for period of joy, peace, serenity, prosperity, and justice" (1). In both senses of the word, one of the early achievements in the approaching millennium will be the global eradication of poliomyelitis. Polio eradication will eliminate disease, reduce disability, and produce direct savings of at least \$1.5 billion per year (2). The eradication initiative has also led combatants to lay down their arms.

In 1988, the nations of the world established a goal of global polio eradication by the year 2000. Progress since then has been exceptional (3). Reported polio cases have declined by 80% since 1988. Wild polioviruses were eradicated from the Western Hemisphere in 1991. Eradication is close in China. In an unprecedented display of international cooperation, 18 contiguous nations of the Middle East, Caucasus, and the Central Asian Republics, including current and former combatants, united in 1995 to conduct Operation MECACAR, immunizing 56 million children. Almost half the world's children under 5 years of age were immunized during polio campaigns in 51 countries that year. India immunized 93 million children on a single day in January 1996.

Although the strategies are proven effective (4), not all the tools necessary for eradication are in place. An estimated \$600 to \$800 million still need to be mobilized. Political commitment remains weak in several countries where the disease is highly endemic. Probably the greatest threat to polio eradication, though, is war and civil strife. As clinics are destroyed, health workers killed, and the civilian population turned into refugees, war zones become fertile fields for epidemics. The last case of polio in the Americas was a Peruvian boy who was not fully immunized because the local clinic had been destroyed by guerrillas. In Afghanistan, decades of war have resulted in less than 20% of the children being immunized. Wild poliovirus was recently reintroduced into Iran from Afghanistan.

During armed conflict, mass immunization campaigns are not just a requirement for polio eradication, they may offer the only means of reaching vulnerable children. The polio eradication initiative has been the stimulus for a number of remarkable cease-fires for immunization. Starting in 1985, days of tranquillity were observed each year in El Salvador so that children could be vaccinated against polio and other diseases (see figure).

In 1993, the Philippine Secretary of Health personally negotiated with rebel leaders, giving them vaccine to immunize their own children. Truces between the Tamil Tigers and the Sri Lankan army were observed in 1995 and 1996, with polio vaccine passed across the front lines during the November 1995 assault on Jaffna. Cease-fires have been declared in Sudan for both polio and dracunculiasis eradication, expanding health truces beyond immunization.

Days of tranquillity permit warring parties to disengage and provide a glimpse of peace, but also give both sides a common goal to serve as a starting point for future negotiations. The resolution of conflict with incorporation of the rebels into the national army in El Salvador and, recently, in the Philippines provides evidence that days of tranquillity can be the first of many steps toward a lasting peace. Polio eradication activities must be conducted amidst current and future conflicts around the world. We are confident that there will be more truces and polio will be eradicated. The challenge for science is to continue the development of tasks and tools that can serve as instruments of peace.

REFERENCES

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