

Polio Eradication

Following the development of a vaccine in 1955 and decades-long inoculation efforts, the disease has been virtually eradicated globally.

Philanthropic and government efforts have nearly eradicated polio around the world, but this dangerous disease—which affected children disproportionately and paralyzed many of its victims—was once incredibly pervasive. At its peak in the 1940s and 1950s, polio crippled or killed a half million people worldwide every year and left many survivors with withered limbs. By 2015, world health authorities reported just 74 cases worldwide.

What led to the breakthrough? Work toward eradication began with an unprecedented investment in medical research to develop a polio vaccine. US President Franklin D. Roosevelt, a polio victim who had established a private foundation for polio therapy in 1927, announced in 1938 the formation of the National Foundation for Infantile Paralysis (NFIP), later rebranded the March of Dimes. Schools, communities, and companies embraced the campaign, and about 80 million Americans contributed to what became an inflation-adjusted \$450 million annual research budget by 1955, or about 25 times the polio research budget of the National Institutes of Health. This funding fueled Jonas Salk's vaccine discovery in 1952 and a successful clinical trial on 2 million schoolchildren the following year. By 1961, mass in-school inoculations effectively controlled the disease. About this time, Albert Sabin invented an oral vaccine, which became the choice for global immunization.

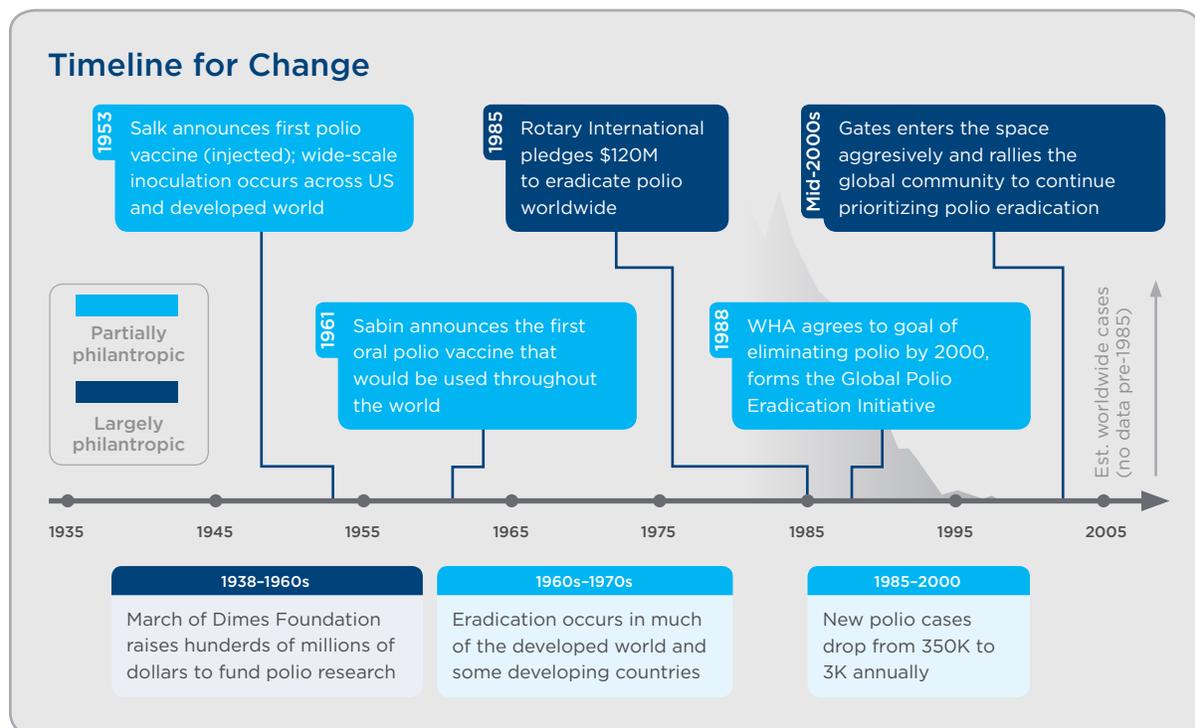
This case study is part of a series that accompanies The Bridgespan Group article “[Audacious Philanthropy: Lessons from 15 World-Changing Initiatives](#)” (*Harvard Business Review*, Sept/Oct 2017). See below for [15 stories of social movements](#) that defied the odds and learn how philanthropy played a role in achieving their life-changing results.

- [The Anti-Apartheid Movement](#)
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With effective vaccines, most developed nations brought polio under control through the 1960s, and focus shifted to the developing world, where the disease continued to kill hundreds of thousands annually. The World Health Organization (WHO) announced in 1980 the global eradication of smallpox through mass inoculation, making it clear that disease could be overcome, and in 1985, another philanthropy, Rotary International, announced that it would donate \$120 million (\$270 million in 2016 dollars) to eradicate polio worldwide.

Three years later the World Health Assembly (WHA) approved the goal of eradicating polio by 2000, leading to a unique public-private partnership, the Global Polio Eradication Initiative (GPEI), housed at the WHO and led by UNICEF, Rotary International, and the US Centers for Disease Control and Prevention. GPEI generated more than \$2 billion over 15 years to scale polio immunization. By 2001, the number of new cases worldwide dropped from almost 400,000 to less than 2,000.

Then, in the mid-2000s, northern Nigeria abandoned vaccinations, causing the disease to re-proliferate across 20 countries that had previously eradicated it. Here, the Bill & Melinda Gates Foundation entered, investing upwards of \$300 million per year to reenergize the global immunization effort. By 2009, global spending on polio eradication had doubled, and today counts for more than \$1 billion annually. By 2015, the number of cases had fallen to the dozens, making near-future eradication a realistic hope.



Philanthropy's Role in Large-Scale Change

Our research shows that breakthrough social initiatives share a set of [five practical approaches to large-scale change](#). In the case of polio eradication, philanthropy played a pivotal role across all of them:

- **Build a shared understanding of the problem:** The March of Dimes campaign built widespread awareness of the need for a polio vaccine. Once available, successful mass inoculations in the United States and other developed nations provided proof that a country could achieve zero polio through mass immunization. Similarly, the global eradication of smallpox (announced in 1980) validated that mass immunization was a realistic path toward the goal of eradication.
- **Craft an emotionally compelling “winnable milestone”:** Rotary International's \$120 million pledge in 1985 represented a first, sizable financial commitment to *worldwide* eradication and rallied the global community around worldwide eradication as an ambitious but achievable goal.
- **Design for massive scale at the outset:** National Foundation for Infantile Paralysis/ March of Dimes' funding led to the development of both Jonas Salk's and Albert Sabin's vaccines, making mass inoculation possible. Salk's, administered through shots, proved scalable for developed countries. Sabin's oral vaccine proved both cheaper and easier to administer and became the most viable for global vaccination campaigns.
- **Drive demand, don't assume it:** National immunization days and other mass immunization programs relied heavily on advertising, supported by both government and foundation funding.
- **Embrace course correction:** When progress toward global eradication stalled in the mid-2000s, funding and leadership from the Bill & Melinda Gates Foundation supported the strategic adjustments needed to rekindle the campaign. The foundation's investment led to extensive surveillance, new vaccine development, and better mobilization campaigns.

Researched and written by Consultant Phil Dearing of The Bridgespan Group, based on Bridgespan interviews with Chelsea Minkler, associate program officer of the Bill & Melinda Gates Foundation; Harry Hull, chair of the Global Polio Eradication Initiative, 1994-1998; David Mercer, area coordinator for surveillance and strategic objective facilitator for communicable diseases, World Health Organization European Regional Office, as well as selected sources.

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