

Background on polio vaccine

April 12, 1955, was a unique moment in our contemporary culture. That date culminated more than 17 years of research that led to the licensure of the first poliovirus vaccine. The vaccine breakthrough was driven by Jonas Salk and his team of scientists at the University of Pittsburgh and the pioneering field trials led by Thomas Francis Jr. at the University of Michigan. The research was funded by the National Foundation for Infantile Paralysis, today known as the March of Dimes.

The fight against polio brought together communities in a national collaboration that at that time was the largest human cooperative effort in history. In the days leading up to the vaccine's approval, children in communities across the United States participated in the field trials as America's "Polio Pioneers." The University of Michigan analyzed the results of the field trials to help ascertain the safety, effectiveness, and potency of the vaccine. Thousands of health-care workers and lay people volunteered their time to assist with the vaccine field trials, the largest ever in United States history. Millions of Americans participated by raising funds in their communities to support the larger research effort and a single goal: victory over polio.

Although polio was eliminated from the Americas in 1994, the disease still circulates in Asia and Africa, paralyzing the world's most vulnerable children. In a continually shrinking world, polio and other vaccine-preventable diseases remain only a plane ride away. The Global Polio Eradication Initiative, spearheaded by the World Health Organization, Rotary International, the CDC and UNICEF, was begun in 1988. That year, an estimated 350,000 children were paralyzed with polio worldwide; in 2004, polio cases had fallen to just over 1,200 cases globally. The Initiative's success will be a triumph of international co-operation, attesting to our ability to unite across borders and differences to conquer global afflictions.

April 12, 2005, marks the 50th anniversary of the first polio vaccine. Since the introduction of the vaccine, great strides have been made in significantly reducing the health impact of vaccine-preventable diseases on children and adults worldwide. Polio was eliminated in the U.S. because protecting the public's health was perceived as a simple necessity, and every effort was made to see that the vaccine would be freely distributed and polio would be eradicated. Since this effort 50 years ago, we can now protect children from more than 12 vaccine preventable diseases and disease rates have been reduced by 99% in the U.S. Yet, without diligent efforts to maintain immunization programs here and strengthen them worldwide, the diseases seen 50 years ago remain a threat to our children.