"Safe, effective, and potent." Conquering Polio at the University of Michigan School of Public Health

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The story of the eradication of polio in the United States is well known. However, the role played by the University of Michigan School of Public Health (UMSPH) is not as familiar. This poster highlights the achievements of the UMSPH in carrying out one of the most successful vaccination campaigns in history, which eventually led to the conquest of polio.

Signs of the Times

“In the early 1950s, before polio vaccines were available, polio outbreaks caused more than 15,000 cases of paralysis each year in the United States.”

The United States' polio epidemic of 1952 involved almost 60,000 cases from all forty-eight states, and the territories of Alaska, Hawaii, and Puerto Rico. Thousands of children were paralyzed, many were confined to crutches or wheelchairs for life, and others, whose breathing muscles were paralyzed, were placed inside a sealed ventilator chamber known as an iron lung.

The 1954 Field Trial

In 1954, the U.S. Vaccine Advisory Committee approved a field test of Dr. Jonas Salk's polio vaccine. The trials, which were among the largest and most publicized clinical trials ever undertaken, were sponsored by the National Foundation for Infantile Paralysis (March of Dimes).

Under the direction of Dr. Thomas Francis, Salk's mentor during a fellowship at UMSPH, the massive controlled field trial was launched. Almost two million children in the United States, between ages of six and nine, participated.

For parents, the Salk vaccine was a godsend, with active polio cases plummeting by almost 90 percent in the first two years following its introduction. Polio has now been virtually eradicated in countries using Salk's vaccine. The Salk polio vaccine transformed a disease that once horrified America into a memory.

The 1955 Polio Vaccine Trial Announcement

On April 12, 1955, in the University of Michigan's Rackham Auditorium, Dr. Thomas Francis Jr., director of the Poliomyelitis Vaccine Evaluation Center at the University of Michigan School of Public Health, announced to the world that the Salk polio vaccine was up to 90% effective in preventing paralytic polio.