

## Dr. Jonas Salk and World Polio Day

Jonas Edward Salk was an American virologist and medical researcher who developed one of the first successful polio vaccines. Salk worked incessantly for two-and-a-half years to create the inactivated polio vaccine.

Before this life-saving discovery, polio was devastating the North Americas, especially children between zero and five years. The disease, also known as poliomyelitis, affects the spinal cord causing paralysis. During the 1940s and 1950s, Polio was the most feared disease, though ten times the number of children were killed in accidents, and more than three times the number succumbed to cancer. The reason was twofold: Poliovirus struck without any warning; and the researchers had no clue as to how it spread from child to child.

In 1988, National governments and five global agencies teamed together to create a public-private partnership, the Global Polio Eradication Initiative, or GPEI. The five partners were: the World Health Organization (WHO), Rotary International (RI), the U.S. Centers for Disease Control and Prevention (CDC), the United Nations Children's Fund (UNICEF), and the Bill and Melinda Gates Foundation. When the GPEI started, polio paralysed more than 1000 children worldwide daily.

By 1951, it had been established that there were three main serotypes of poliovirus, simply known as Type 1, Type 2 and Type 3.

Dr. Salk's polio vaccine came into use in 1955. His vaccine needed to be injected, thus requiring medical personnel.

Dr. Albert Sabin also worked on developing a polio vaccine, and was able to create one that could be orally administered. This came into use in 1961 for the Type 1 and in 1962 for the Types 2 and 3 poliovirus strains. By 1964, a single vaccine which could administer all Types orally had been approved. This could be given by any non-medical volunteer interested in participating in the polio eradication effort.

Rotary International's participation was crucial to the success of GPEI, as it provided three major areas of coverage: Volunteers ready to travel all across the world to help with the oral vaccination at their own cost; Donating towards the eradication costs through the 1.2 million Rotarians worldwide; and Advocacy, in some of the numerous countries they visited, where they encountered opposition to the vaccination process due to religion, mistrust or other reasons. Between 1988, when GPEI started, and 2001, the number of countries where polio was endemic had been reduced from 125 to just 10; and the number of wild poliovirus cases had dropped from 350,000 annually worldwide, to just 1000.

Shortly after 2001, Rotary International decided on designating a special day in recognition of Dr. Jonas Salk's incredible work towards polio eradication, close to his birthday. So, October 24<sup>th</sup>., each year since then, is marked as World Polio Day, a day when Rotary Clubs around the world celebrate the tremendous progress that has been made in the eradication process over the past 30+ years. Fundraising is

still a huge part of the events on this Day, with the Bill and Melinda Gates Foundation's 2:1 match working as a huge incentive to raise funds. The GPEI is so close to getting rid of polio now, with just two countries to focus on, Pakistan and Afghanistan, with a total of 125 cases so far this year. The focus is narrow, but the costs are still high, so every \$ collected is a \$ that is going to help ram that final nail in the polio coffin. Rotary made a promise to the world's children! The children deserve this to happen, sooner than later!

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