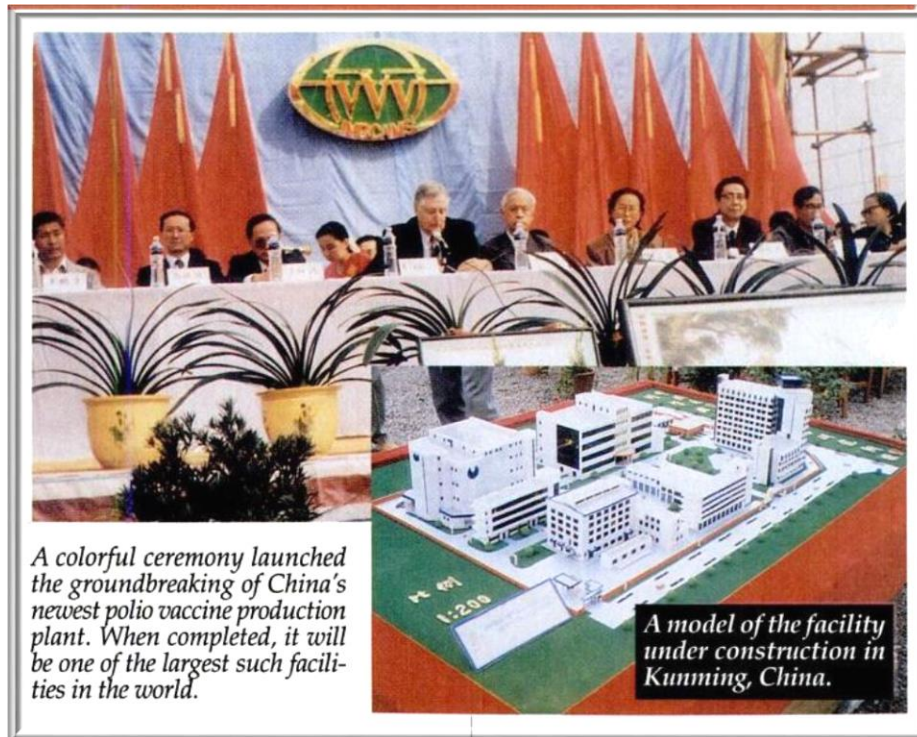


Rotary's Crusade against Polio in China since 1989

Built the world's largest polio vaccine plant in Kunming

By Herbert K. Lau (劉敬恒) (Rotary China Historian)

24 October 2015



News clipping on 8 October 1992

October 24 is Rotary's World Polio Day. On this special day, we may look back quarter century ago a wonderful "End Polio" project in China --- building the world's largest polio vaccine plant in 1989 in Kunming (昆明市), the capital city of Yunnan Province (雲南省).

The year 1989 was a year of mega student petitions, rallies and demonstrations in various major Chinese cities during the early months, with the Beijing Incident (北京風波) in particular that impacted the universal value of the Western world. Since June, there was "political cold war" between the Communist China and the leading nations in the Western world, caused economic sanctions to China. However, disregarding the sensitive environment but to achieve the global mission of Polio Eradication, the Rotary Foundation of Rotary International made a first ever largest special grant of US\$15 million in October 1989 to the Health Ministry of the People's Republic of China (中華人民共和國衛生部) for the sole purpose of "building a polio vaccine plant in Kunming". That was through the administration of the World Bank, since there was not an existing Rotary Club in the Chinese Mainland to serve as the handling vehicle.

The global mission of Polio Eradication

PolioPlus, the most ambitious program in Rotary's history, is the volunteer arm of the Global Polio Eradication Initiative. For the last three decades, Rotary has led the private sector in the global effort to rid the world of this crippling disease. Today, PolioPlus and its role in the initiative is recognized worldwide as a model of public-private cooperation in pursuit of a humanitarian goal.

Rotary's leadership, beginning in 1985, inspired the World Health Assembly to pass a resolution to eradicate polio, which paved the way for the formation of the Global Polio Eradication Initiative in 1988. Since then, Rotary became the first private volunteer organization to make a major commitment to child immunization in developing countries. Subsequently in the next 3 years, the Rotary Foundation of R.I. has allocated more than US\$172 million for PolioPlus projects in 97 nations to fully immunize more than 500 million children against polio. While most of the grant funds were used to purchase vaccine (through UNICEF or the Pan American Health Organization), additional funds had been used for related items needed to carry out immunization procedures. This included funds to provide cold-chain equipment (used to refrigerate the vaccine to maintain its potency), publicity and training materials for Rotarians, and expert technical assistance to implement the program.

Rotary became a major partner in the Expanded Program on Immunization (EPI) of the World Health Organization (WHO). The progress has been dramatic. In 1985, an estimated 500,000 children contracted polio. In 1990, this number plummeted to about 150,000. Rotarians at the grassroots level have received international acclaim for their mobilization efforts. Around the world, the Rotary emblem has become a familiar sign at vaccination posts, on uniforms, and on posters promoting polio immunization. The global strategy advocates:

- Increasing vaccine coverage to at least 90% worldwide;
- Supplementary vaccine activities, such as mass immunization days and "mop-up" operations, to interrupt transmission of the polio virus;
- Improved surveillance, including weekly reporting and prompt follow-up visits of all suspected cases;
- Aggressive outbreak control, immunizing all children in an area where a case of polio is suspected;
- Establishing an effective network of laboratories in each country to help identify suspected polio cases.

Thousands of Rotarians around the world have volunteered during National Immunization Days to immunize children. Rotarians work to encourage both donor and polio-affected governments to commit the political and financial resources needed to eradicate polio.

In the late 1980s, the Western Pacific Region was targeted to become the second to achieve polio eradication. Polio remained prevalent in 6 countries: Cambodia, China, Laos, Papua New Guinea, the Philippines, and Vietnam. The People's Republic of China accounted for over 80% of the reported cases in this region --- and 25% of the reported cases in the world. Although it has an impressive polio vaccine coverage rate of 97%, some 5,089 cases of polio (in a population of 1.1 billion) were reported in 1990. As the world's most populous nation, China

was critical to achieving the World Health Organization's goal of global eradication by the year 2000. (It was second only to India in number of polio cases.) China and 28 other countries in the Western Pacific Region had resolved to wipe out polio even earlier -- by 1995.

The Kunming Plant

The Rotary Foundation of Rotary International therefore decided to award US\$15 million to help fund construction of a polio vaccine manufacturing facility situated in Kunming, Yunnan Province, south-central China. The award was being administered through the World Bank in October 1989 since there were no Rotary clubs in the Chinese Mainland. This Rotary's grant was the largest ever received by the World Bank from a non-governmental organization.

On 8 October 1992, groundbreaking ceremony was held for what would become one of the largest polio vaccine production plants in the world. At the invitation of the Chinese Government, Past R.I. Treasurer-Director (1987-1988) Brian Knowles joined senior Chinese official for the ceremony, representing both Rotary and the World Bank. The event capped more than 5 years of planning and technical training. The building was a state-of-the-art facility that would produce 100 million doses of oral polio vaccine annually -- greatly increasing China's capacity to produce viable polio vaccine. The production of vaccine was scheduled to begin in 1996, and would meet WHO standards.

The Netherlands' National Institute of Public Health and a Dutch engineering firm, the DHV Group, helped to design and built the plant. Construction of the plant was supervised by China's Ministry of Health, as well as representatives of Rotary and the World Bank

Through UNICEF (United Nations International Children's Emergency Fund), PolioPlus also funded a training grant of US\$899,000 for personnel training in surveillance and laboratory work. The program has created 20 training centers and laboratories in China.

In March 1992, 20 Chinese physicians and a computer specialist completed a six-week epidemiology workshop in Atlanta, Georgia, U.S.A., at the Centers for Disease Control and Prevention, as well as the Emory University School of Public Health. Since returning to China, the physicians started preparations for conducting similar training programs for health workers in their respective areas.

China, then, was representing one fifth of the world's population and has 23 million newborns each year. The new facility was integral to the effort to eradicate polio worldwide. It would ensure that, for the first time, children in China would receive vaccine that met standards set by the World Health Organization.

World's largest National Polio Immunization Days in China

For a country that reported more than 5,000 polio cases in 1990 --- more than 23% of all cases worldwide --- this was a proud achievement. In 1992, China carried out supplemental immunizations in 25 of the country's 30 provinces, after a group of 30 Chinese health officials traveled to Brazil, Mexico, and Guatemala to observe how National Immunization Days (NID) were conducted. In the first 8 months of 1993, a record low of 348 cases were reported.

While the Kunming Plant was still in construction progress, there were the first National Polio Immunization Days (全國消滅脊髓灰質炎強化免疫活動) launched in China, which made China reaching 100 million children in historic immunization campaign.

On 5 December 1993, the People's Republic of China launched the world's largest National Immunization Day by then. In a 24-hour period, the world's most populous country immunized more children than in all of Asia and Africa. An estimated 100 million children received 2 doses each of oral polio vaccine at local immunization posts and health centers. Chinese President Jiang Zemin (中國國家主席江澤民) and several state leaders attended immunization sessions in Beijing (北京), as well as in some cities of other provinces.



(新華社) 1993年12月5日

江澤民主席在北京為一名兒童喂服脊髓灰質炎疫苗後，小朋友親吻江爺爺。

President Jiang received a kiss after his hands-on oral vaccination to a girl. (Xinhua)

Preliminary reports for the historical first round indicated 90% coverage, which did not include house-to-house visits on 7-8 December 1993, to immunize children not reached earlier.

Dr. E.G.P. Haran, of India, Rotary's regional advisor for the PolioPlus program in Asia, was a member of a special advance team of 16 international experts who visited China to review preparations for the NIDs. They met with government officials, health personnel, and media to promote the program and strengthen support, and gave lectures and provided recommendations on different approaches to vaccinating children.

Dr. Haran noted the great support and enthusiasm for Rotary. *“There were banners everywhere welcoming us. Many people were aware of the efforts of Rotary and our health partners.”* Rotary was working with WHO, UNICEF, the U.S. Centers for Disease Control and Prevention, the Japanese government, and other organizations to help battle polio in China.

Dr. Haran explained that China's national immunization days were modeled after those that had been conducted so successfully in Latin America. *"China's success shows that we can transfer the Latin American model to the other side of the Pacific."*

Dr. Haran said he was encouraged by China's progress. *"The bold initiative of national immunization days is going to have a significant effect in creating a momentum in Asia. And without the support of Rotary, this massive immunization effort could not have been achieved on this scale."*

Additional national immunization days were arranged for 1994-95 and 1995-96. Since 1993, the country had vaccinated twice a year more than 85 million children on each day. During the first three years, China had made dramatic advances in working toward a polio-free world. Once a stronghold of the disease, China had organized some of the world's largest national immunization days (NIDs).

The then International PolioPlus Committee Vice Chairman Herbert A. Pigman said the polio eradication program helped Rotary gain the trust and enthusiastic cooperation of the Chinese Government. *"China did an excellent job in carrying out this massive public health initiative,"* said Pigman, noting that more than 160 million children were immunized, reducing polio cases from 10,000 in 1981 to 1,191 in 1992.

China Invited Rotarians to participate in National Immunization Days

Rotary Foundation Trustee Chairman Royce Abbey of Australia received a government invitation to observe the second round of polio immunizations conducted in China on 5 January 1994. Rotary Foundation Trustee Jiichiro F. "Frank" Nakajima (中島治一郎) of Japan and past District 2640 Governor Masami Hiraoka (平岡正巳), the PolioPlus Task Force Coordinator for Asia, joined Royce in China. Accompanying by WHO West Pacific officers, the team visited Huizhou, Guangdong Province (廣東省惠州), to observe the local polio immunization.

The Rotary visit came in the wake of the enormously successful first NID on 5 December 1993, in which a record of 100 million children were immunized in a 24-hour period.

Royce reported that he personally administered polio vaccine to a number of infants. *"We traveled some 100 miles (161 km) by car on very busy roads outside the major towns to visit country areas. Immunization efforts were visible in all areas. We all agreed we were witnessing a major move toward eradication of polio in China."*

Rotary worked with WHO, UNICEF, the U.S. Centers for Disease Control and Prevention (CDC), the Japanese Government, and other organizations to help eradicate polio in China. Dr. Alan Hinman, U.S. Assistant Surgeon General (who represented CDC), also observed the second NID. The Rotary Foundation of R.I. helped to support this milestone effort with a PolioPlus grant of US\$2 million toward both NIDs, and Japanese Rotarians raised an additional US\$750,000 in a grass-roots effort. (This was in addition to the amount raised in Japan during the PolioPlus Campaign.) Since there were no Rotary Clubs in the Chinese Mainland, Japan's support was especially helpful. Moreover, Japan's government donated another US\$2 million, supplemented by US\$300,000 from the country's private sector.

Excerpt from a statement 1994 issued by the WHO's regional office in Manila, it said: *“The support from all sectors of the government and the public was tremendous. Rotary shares a considerable part of the credit for this success by providing vaccine for this NID as well as vaccine for last year's province-wide immunization days.”*

Chinese Health Minister received Polio Eradication Award

During the three-year campaign, China had made dramatic advanced in working toward a polio-free world. Once a stronghold of the disease, China had organized some of the world's largest national immunization days (NIDs). Since 1993, they have vaccinated twice a year more than 85 million children on each day. In recognition of this and other efforts, Past Rotary International President M.A.T. Caparas presented a Polio Eradication Award to Dr. Chen Minzhang, M.D., China's Minister of Health (衛生部部長陳敏章博士). The Award was given by Rotary to those individuals whose work has significantly advanced the global polio eradication effort. Past President Caparas, representing Rotary International President Luis Vicente Giay, gave the award at a December 1996 ceremony in Beijing, following the first round of 1996-1997 immunization campaign. Health officials conducted the second round in January. China's massive campaigns have nearly wiped out the disease in that vast country. The World Health Organization has reported only one laboratory-confirmed caused by the wild polio virus in 1995, which was imported from neighboring Myanmar (Burma).

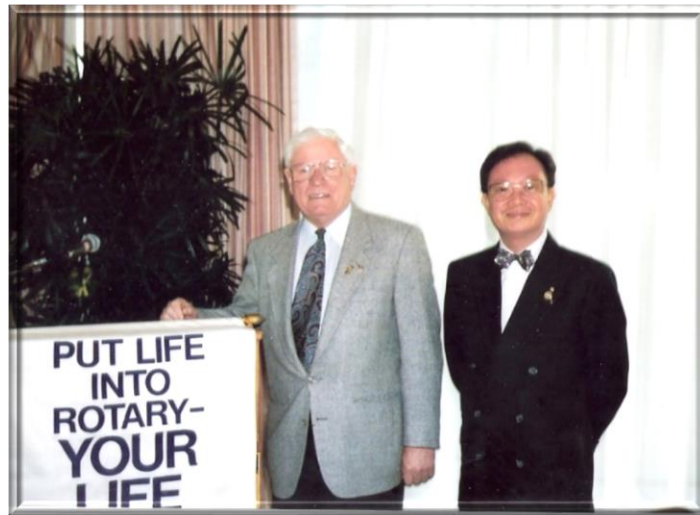
China achieved polio-free status in 2001

According to the report by UNICEF, China's Expanded Program on Immunization has been a highly successful and cost-effective public health intervention. Hundreds of millions of children have been protected from vaccine-preventable diseases. Major achievements made by the program include:

- A 98% decrease in mortality from and incidence of major infectious diseases [poliomyelitis (hereafter 'polio'), measles, tetanus, diphtheria and pertussis] between 1978 and 1995.
- China achieved universal childhood immunization in 1990, which means that all provinces and counties in the country reached 85% coverage of Bacilli Calmette-Guérin vaccine (BCG), oral polio vaccine (OPV), diphtheria, pertussis and tetanus vaccine (DPT) and measles vaccine for 1-year-old children.
- An 85% coverage of BCG, OPV, DPT and measles vaccines for 1-year-old children in every township in China in 1996.
- In 2000, China achieved polio-free status. Though there was a subsequent outbreak following the importation of wild poliovirus in 2011 in Xinjiang (新疆), the Government immediately adopted a variety of response measures, including carrying out several rounds of supplementary immunization activities (SIAs) for polio in the region, which helped to prevent the circulation of wild poliovirus and stopped the epidemic. In November 2012, WHO affirmed China's polio-free status.
- In 2012, WHO declared that maternal and newborn tetanus had been eliminated in China.

Thanks be to Rotary's efforts, China, along with other countries in the Western Pacific Region, was declared polio-free in October 2001. The Project worth was totally amounted to US\$21.94 million, with a span of 5 years from 1989 to 1996. The first two rounds of immunizations were believed to be the largest preventive health campaigns ever conducted anywhere in the history of mankind.

So far in the Rotary China History, to date, that was the largest Rotary's gift to and the Rotary Foundation Project in China. Moreover, it was also very exceptionally without a single local Rotary Club available in conducting and monitoring a project of such large scale, while the People's Republic of China was not yet a "Rotary Country".



Herbert K. Lau (劉敬恒) greeted Royce Abbey in Hong Kong --- January 1994

(The Presidential Class of 1988-1989)



《APPENDIX》 From the archives of China Disabled Persons' Federation:---

中国残疾人联合会大事记

1993年12月5日，由卫生部、全国妇联、中国残联共同发起，经国务院批准的全国消灭脊髓灰质炎强化免疫活动在全国开展。党和国家领导人江泽民、陈慕华、彭佩云、阿沛·阿旺晋美以及有关部门领导陈敏章、康冷、邓朴方、李其炎、张健民等领导分别到西城区柳荫街居委会、东城区朝阳门社区、北京市妇产医院和中国聋儿康复研究中心，为4岁以下的儿童喂服了脊髓灰质炎疫苗，并视察了那里强化免疫情况。



(新華社) 1998 年 12 月 4 日

國務院總理朱鎔基今天上午來到北京市西城區北新華街幼稚園，參加全國消滅脊髓灰質炎第六次強化免疫活動，給適齡兒童喂服脊髓灰質炎糖丸疫苗。

(Xinhua News Agency) 4 December 1998

Premier Zhu Rongji of the China State Council visits the North Xinhua Street Kindergarten in Xicheng District, Beijing, this morning, to participate in the 6th National Immunization Day. He feeds oral polio vaccine sugar pills to the kids.



2011 年 4 月 25 日，國務院總理李克強在北京市豐台區方莊社區衛生服務中心喂孩子服食疫苗糖丸。

On 25 April 2011, Chinese Premier Li Keqiang feeds children with oral polio vaccine at the Fangzhuang Community Health Service Center, Fengtai District, Beijing.



中國的「全國消滅脊髓灰質炎強化免疫活動」每年12月15日舉行。
National Polio Immunization Day is launched in China on December 15 every year.

《APPENDIX》

15 November 1993

Announcement from the China State Council on National Immunization Days

国务院办公厅转发卫生部关于开展强化免疫活动消灭脊髓灰质炎报告的通知

各省、自治区、直辖市人民政府，国务院各部委、各直属机构：

卫生部《关于开展强化免疫活动消灭脊髓灰质炎的报告》已经国务院同意，现转发给你们，请遵照执行。

附：关于开展强化免疫活动消灭脊髓灰质炎的报告

国务院：

脊髓灰质炎(俗称小儿麻痹)是一种不能有效治疗，却可用疫苗彻底预防的急性传染病。病毒的存在和传播，威胁着每个儿童，一旦发病将导致儿童肢体损伤、残疾乃至死亡；未接受免疫的儿童，不仅自己可能受害，而且还会作为传染源危及他人。

鉴于该病危害大、传染性强以及“可防不可治”的特点，世界儿童问题首脑会议通过的《儿童生存、保护和发展世界宣言》，把消灭脊髓灰质炎作为继消灭天花后人类限期消灭的第二种传染病，要求各国采取全球性的统一行动。

为实现《九十年代中国儿童发展规划纲要》规定的一九九五年消灭脊髓灰质炎的目标，保护儿童健康，提高人口素质，国家决定开展强化免疫活动。现将有关工作报告如下：

一、

自我国开展计划免疫工作以来，脊髓灰质炎疫苗接种率提高，发病率显著下降，取得了可喜成绩。但是，由于我国地域辽阔、人口众多，部分地区计划免疫工作落实不力，目前全国仍有一些地区出现疫情，时有暴发流行。

各级政府要加强领导，将强化免疫工作切实纳入议程，实行目标管理并依据全国实施方案制定本地工作计划，落实经费安排，采取有力措施，认真组织实施。卫生及有关部门要按照各自职责，做好疫苗的生产、储运、供应、发放和指导服务工作。机关、团体、企事业单位和城乡基层组织，要做好所属范围的强化免疫工作，每位家长应主动促使孩子服用疫苗。公众传播媒介要广泛进行宣传，普及知识，增强免疫保护意识，做到家喻户晓，人人参与。

二、

在冬季，脊髓灰质炎病毒传播能力最弱，在此期间开展强化免疫活动，是能否消灭脊髓灰质炎的关键。为此，决定从现在起至一九九五年一月期间，每年的十二月五日 and 一月五日，对全国所有四岁以下儿童各加服一次疫苗。各地要按照全国实施方案的要求，统一部署，统一行动，在保证一般对象服用疫苗的同时，重点做好流动、暂住和漏服儿童的服用疫苗工作。

三、

各地区要认真做好疫苗服用的统计、考核、检查、评价和总结工作。各省、自治区、直辖市卫生厅(局)于每年三月十五日以前，将统计报表和工作总结报送卫生部。

以上意见如无不妥，请批转各地区、各部门执行。

1993年11月15日

PRO & CON

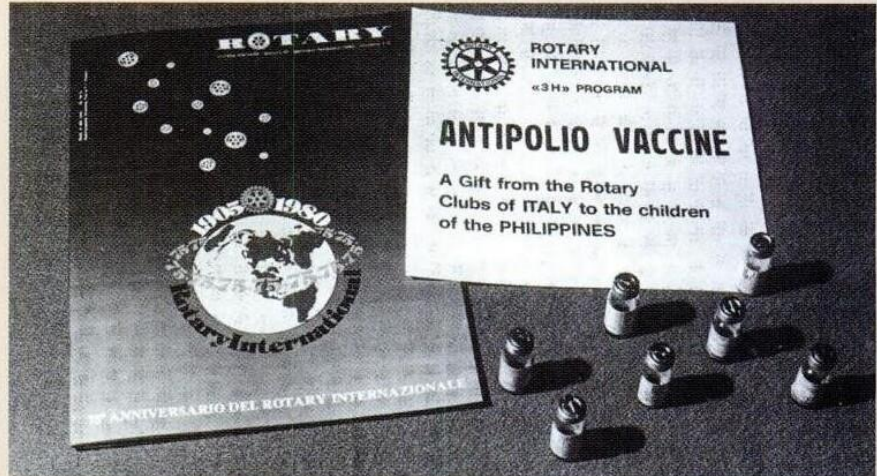
PolioPlus

PolioPlus and Rotary International are so firmly linked that it's hard to imagine one without the other. But it took changes within Rotary and some incredibly persistent, visionary Rotarians to make a mass immunization program a reality.

"I don't think anyone objected to protecting children against polio," explains Dr. John L. Sever, a past governor of District 7620 from Potomac, Md., USA, who served as head of the Infectious Diseases Branch at the National Institutes of Health from 1971 to 1988. He was among a small group urging Rotary to immunize children against disease.

"But the idea had been that each club or district would know their community best and shouldn't be told what to do." Some Rotarians also feared that a central focus on one issue would take away funding and emphasis on other Rotary programs, such as scholarship, he says.

A major rules barrier also existed: A resolution enacted at the 1923 RI Convention declared Rotary clubs to be autonomous and decreed that RI could not enforce Rotary-wide programs on clubs. As a result, Rotary had never embarked on a worldwide project; nor had the organization ever undertaken such a huge fundraising effort – originally US\$120 million.



▲ Although some Rotarians opposed taking on a corporate project, Rotary clubs worldwide responded to the early fight against polio in the Philippines.

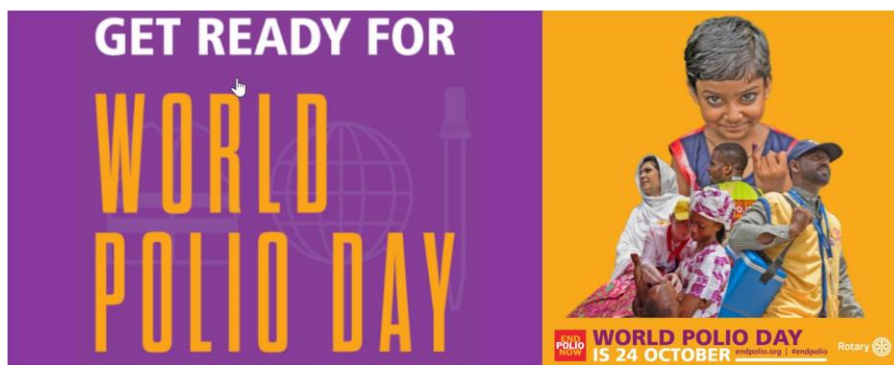
The key factor in getting around these barriers was the development of Health, Hunger and Humanity (3-H) Grants, the brainchild of 1978-79 RI President Clem Renouf, which allowed Rotarians to tackle large, more costly programs. One of the first 3-H Grants funded the immunization of six million children in the Philippines in 1979. The following year, the Council on Legislation adopted a resolution to continue the 3-H program and authorized Rotary Foundation funds for 3-H projects.

The council's action resolved some internal problems, but Rotary faced other challenges. The World Health

Organization (WHO) rejected Rotary's overtures, saying they didn't need yet another volunteer group coming in, immunizing a few children, then leaving. And there were conflicting theories on immunization, with Rotary favoring mass immunization and WHO advocating a different approach.

Rotary went on to prove both its fundraising ability and its staying power to its partners and the world. Today, with polio eradication in sight, PolioPlus has also proved to skeptical Rotarians the value of taking on a worldwide project.

– ANNE STEIN



World Polio Day is observed on **October 24** every year to raise awareness for polio vaccination and eradication of polio. The World Polio Day was established by Rotary International over a decade ago to commemorate the birth of Jonas Salk who led the first team to develop a vaccine against poliomyelitis.



Dear Rotarians:

On behalf of the World Health Organization (WHO), the Centers for Disease Control and Prevention (CDC), and the United Nations Children's Fund (UNICEF), we congratulate you as you celebrate the Rotary Centennial and your *Century of Service* for the betterment of humanity.

It has been our privilege to work in partnership with Rotary International since 1985 in the Global Polio Eradication Initiative, and we are honored to acknowledge the selfless dedication of Rotarians in this historic effort. It was Rotary International's original vision that convinced the global community to take on this immense challenge. Now, thanks to the extraordinary support of 1.2 million Rotarians in more than 160 countries, your financial commitments of more than US\$600 million, and your continued political advocacy, you have helped reduce the global incidence of polio by more than 99 percent – from an estimated 350,000 cases in 1988 to about 1,200 cases in 2004.

Global challenges such as the eradication of polio can only be tackled when governments, United Nations agencies, and civil society organizations like Rotary International and its membership work together in partnership over many years. Rotarians should be proud that due to their efforts over 2 billion children have been vaccinated, and more than 5 million children who would have been paralyzed by polio are walking today.

A world without polio is truly within our grasp. Together we must ensure that all children are reached and immunized in 2005, even in the most difficult-to-reach areas of the world.

Thank you for your outstanding commitment and very noble efforts to provide a healthier future for children all over the world. You truly exemplify Rotary's International's motto of *Service Above Self*.

Yours sincerely,

Dr LEE Jong-Wook
Director-General
World Health Organization

Dr Julie Louise Gerberding
Director
Centers for Disease Control and Prevention

Carol Bellamy
Executive Director
United Nations Children's Fund