

PATH'S WORK IN VIETNAM BEGAN in 1980, when we began helping Vietnamese couples access condoms for family planning. Seventeen years after our arrival, we opened a permanent office in Hanoi, growing our national presence and broadening our focus from contraceptive technologies to a range of health issues, including vaccines and immunizations; reproductive, maternal, and child health; health technologies; and emerging and epidemic diseases.

Collaboration has been at the core of our work in Vietnam. For 30 years, PATH has collaborated with a diverse range of partners, from government ministries to nongovernmental organizations to the private sector. Through these alliances, we leverage public and private resources, increase human and financial capital, and maximize opportunities to influence public policy and scale up effective programs. These partnerships continue to be vital to the success and sustainability of PATH's work in Vietnam.

## VACCINES AND IMMUNIZATION

A child's best chance to live a healthy life often comes from vaccines that protect against life-threatening and ravaging diseases. PATH has partnered with the National Expanded Program on Immunization (NEPI) since 1997 to increase the quality, safety, and efficiency of Vietnam's routine immunization services.

The PATH-NEPI partnership designed and delivered courses in injection safety, vaccine management, and immunization planning to commune and district health staff and developed and piloted a more effective national supervisory system. Through the Improving Routine Immunization Services project, 3,396 provincial, district, and commune health staff, as well as 3,520 village health workers, are better prepared to manage and deliver vaccines. Vietnam's health system is also better positioned to support immunization services. PATH and NEPI are continuing to strengthen the country's immunization system, working together to identify solutions and implement approaches to improve vaccine delivery in Vietnam.

PATH's research on vaccine freezing, which compromises the potency of immunizations, has increased government recognition of the issue and has led to advocacy and training activities to raise health staff awareness and improve their skills in vaccine management. Today, PATH works with the World Health Organization through the Optimize project to strengthen the cold chain, explore new refrigeration options, and improve information systems for better monitoring of childhood immunizations.

PATH also works to increase access to new vaccines and the uptake of existing vaccines. Our partnership with the National Institute of Hygiene and Epidemiology has helped to prepare Vietnam for the introduction of the human papillomavirus vaccine to prevent cervical cancer, and we currently support NEPI to increase the coverage and timeliness of hepatitis B birth dose vaccinations by addressing existing provider and community concerns related to the vaccine.



# REPRODUCTIVE, MATERNAL, AND CHILD HEALTH

Beginning with our work to establish a condom manufacturing facility in Ho Chi Minh City three decades ago, PATH continues to partner with the public and private sectors to improve the health of women and children and to increase access to essential reproductive health services.

In Vietnam, the public sector is the leading provider of contraceptive methods. With a growing population of women of reproductive age, an overall increase in contraceptive use, and reduced donor support of contraceptives, the demands on the public sector are increasing. PATH leads an effort with the Vietnam Ministry of Health to identify target populations for public-sector distribution of family planning services. We are developing a comprehensive approach for providing services to segments of the population that the public and private sectors are best suited to serve. As development partners discontinue their contraceptive donations in light of Vietnam's improved economic indicators, this approach will help ensure affordable, good-quality, and accessible services and a sustainable model for providing family planning services.

Among developing countries, Vietnam has one of the highest documented abortion rates, with a high proportion of abortions obtained by young or unmarried women. The Ministry of Health is adopting policies and programs to give women access to safer abortions and other reproductive health services. PATH helps by building the capacity of health providers at the district and provincial levels to ensure access to good-quality medical abortion services and to strengthen postabortion family planning counseling and service delivery.

PATH is also identifying ways of strengthening prevention of cervical cancer—a preventable disease that kills more than 270,000 women worldwide each year—through screening and treatment of adult women. Partnering with provincial level partners, we are piloting a "screen and treat" model, strengthening the referral system for cervical cancer treatment, and working with the Ministry of Health to develop national guidelines for cervical cancer control.

PATH has also joined forces with the government to protect children from diarrheal disease, the second leading killer of children. In collaboration with the Ministry of Health, PATH works to reprioritize diarrheal disease in Vietnam through developing and piloting national diarrheal disease control guidelines.

Across many of its programs, PATH engages the private sector to improve access to reproductive and maternal and child health services. Since 2002, PATH has been working to strengthen private pharmacies' capacity to provide high-quality health services. A PATH model currently in place engages private pharmacies to improve the capacity of frontline staff to provide high-quality health information and referrals. Partnering with local pharmacies, public health facilities, and provincial health departments, we are better integrating pharmacies into the formal health system.



## **HEALTH TECHNOLOGIES**

Introducing and increasing access to appropriate and affordable health technologies is an important component of PATH's work in Vietnam.

To encourage the safe disposal of medical waste, PATH worked with the National Institute of Hygiene and Epidemiology and the Ministry of Health to model and document the use of needle removers (devices that safely remove the tips of syringe needles and other medical sharps) by primary care providers. Ministry of Health guidelines now recommend needle removers as another option for sharps waste management in commune health centers.

PATH also adapts existing health technologies to suit the situation on the ground. PATH and NEPI conducted research on the applicability of using hepatitis B vaccine out of the cold chain at commune health centers where cold storage is unavailable. The study found that the use of such a strategy for reaching newborns could significantly increase the timeliness and coverage of immunizations without compromising safety or efficacy. Before this project, only 45 percent of infants received the birth dose within 72 hours; afterward, 83 percent received their first dose within 24 hours, without compromising vaccine effectiveness.



Refrigeration is the most important aspect of the cold chain for vaccines, and solar refrigeration is an attractive technology in countries like Vietnam where reliable grid electricity and the expense of electric bills can burden the health system. Solar refrigerators, however, often break down after only a few years of use, and the battery that is used to store energy in the system for nighttime and low-light conditions is often the weak link. PATH is testing new battery technology in Vietnam developed for the hybrid and electric automobile industry with the potential to last much longer than traditional lead-acid batteries and to improve solar refrigeration technologies in the future.

Worldwide, excessive bleeding after childbirth is the leading cause of pregnancy-related deaths. Using drugs such as oxytocin during the third stage of labor can reduce these deaths by reducing excessive bleeding. Because oxytocin is generally filled in ampoules, however, it can be difficult to administer. In Vietnam, 40 percent of midwives reported that it was difficult to fill the syringe with oxytocin, and 30 percent said it was time consuming. PATH worked with the Ministry of Health to evaluate the use of oxytocin in the Uniject® device, a prefilled injection device developed by PATH, to stop excessive bleeding during childbirth. The study found that the Uniject device overcame many barriers to using oxytocin in ampoules, was less expensive, and confirmed the benefit of administering oxytocin in the Uniject device during the third stage of labor to prevent postpartum hemorrhage. The study results led Vietnam to adopt official national guidelines recommending the use of active management of the third stage of labor.

Uniject is a registered trademark of BD.

#### EMERGING AND EPIDEMIC DISEASES

Globally, PATH's work in emerging and epidemic diseases targets AIDS, malaria, tuberculosis, and other diseases that disproportionately impact poor countries. In Vietnam, our growing portfolio focuses on efforts to control the spread of tuberculosis and to prevent influenza.

Vietnam is tenth on the World Health Organization's list of 22 countries with the highest burden of tuberculosis. Together, these 22 countries account for more than 80 percent of the world's cases. Working with provincial partners to mobilize and strengthen the capacity of private pharmacies and clinics in the fight against HIV/AIDS and tuberculosis, we are training pharmacy staff and private clinicians to correctly identify potential tuberculosis symptoms and to refer clients to appropriate testing centers and health and information service providers. The program builds trust and strengthens relations between the public and private health sectors. PATH is now scaling up the public-private mix model in ten new provinces throughout Vietnam.

PATH also works with the government and vaccine manufacturers within Vietnam to build production and clinical evaluation capacity for high-quality, safe, and effective vaccines for influenza. By building the country's independent and sustainable capacity to develop seasonal and pandemic influenza vaccines, PATH is helping Vietnam protect itself from a potential influenza pandemic.

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PATH is an international nonprofit organization that creates sustainable, culturally relevant solutions, enabling communities worldwide to break longstanding cycles of poor health. By collaborating with diverse public- and private-sector partners, PATH helps provide appropriate health technologies and vital strategies that change the way people think and act. PATH's work improves global health and well-being. For more information, please visit www.path.org.

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