According to the World Health Organization (WHO), over 1 billion people — one sixth of the world’s population — suffer from one or more neglected tropical diseases. Those most affected are the poorest populations often living in remote, rural areas, urban slums or in conflict zones. “These diseases are preventable and treatable when the proper balance of public and private sector resources are applied — and that is the role the Task Force plays in controlling or eliminating these diseases,” says Dr. Mark Rosenberg, President and CEO of the Emory affiliate known as the Task Force for Global Health. Building on a legacy of collaboration, the Task Force programs appreciate that shared access to resources, information, and best practices is critical to address global health problems effectively.

The Task Force for Global Health houses four programs focused on neglected tropical diseases (NTDs): The Mectizan Donation Program, The Lymphatic Filariasis Support Center, Children Without Worms, and the International Trachoma Initiative. Each of the Task Force NTD programs was established according to a model developed with the introduction of the Mectizan Donation Program. “In 1987, when Merck & Co., Inc. approached Task Force founder Dr. William Foege about the research showing effective and safe use of the drug ivermectin (trade name Mectizan®) for the treatment of onchocerciasis in 1987, it opened the door to a novel partnership. The Task Force worked with Merck to create a model for how global health could benefit from collaboration with the private sector, and this was a first,” notes Dr. Adrian Hopkins, Director of the Mectizan Donation Program. Since then, the Task Force has developed other collaborations with the leaders in the pharmaceutical industry. Johnson & Johnson supports the efforts of the Task Force’s Children Without Worms program by donating the drug mebendazole to national programs that combine prevention with treatment, as part of the company’s efforts to reduce and control the global burden of childhood infection from soil transmitted helminths. GlaxoSmithKline donates the drug albendazole for the treatment of lymphatic filariasis and provides funding for a fellowship program for public health graduate students to support the Task Force programs. Pfizer Inc. provides the drug Zithromax® to treat and prevent blinding trachoma, as part of the Task Force’s International Trachoma Initiative, and provides funding support for the infrastructure necessary for education and outreach about the disease. These external collaborations benefit from the strong interaction of the program staff and the opportunity for internal collaboration at the Task Force.

Research on collaborations has shown that peers working in close proximity are more effective in accessing and sharing information across boundaries, more efficient in how they distribute ideas, experience and knowledge, and more likely to take advantage of the informal peer network. This is true within the NTD programs at the Task Force. “There are currently about 20 NTD staff at the Task Force. When we moved into this building in 2007, we deliberately positioned the NTD staff offices and workspaces to facilitate informal exchange, as well as encourage broader interactions,” notes Laura Alberti, Human Resources
QUESTIONS FOR ... Dr. Walter Dowdle

New Approach in the Fight Against Polio

Since joining the Task Force in 1994, Dr. Walter Dowdle has been the driving force behind the Task Force’s involvement in polio eradication, as well as global health initiatives related to influenza and HIV. Dowdle, a former CDC Deputy Director, brought the Task Force into a broad network of laboratory scientists focused on virus research, vaccine development and evaluation, and public health policy in the areas of malaria, polio, HIV, and influenza. Currently, he is a consultant to the World Health Organization (WHO) Global Poliomyelitis Eradication Initiative and directs the Task Force’s Polio Antiviral Drug Initiative. We sat down with Dr. Dowdle to discuss the evolution of the polio eradication initiative at the Task Force, the challenges along the way, and the current efforts toward eradication.

When did you first become interested in the polio virus?

The development of a vaccine for polio coincided with my years in graduate school. Like many of my generation reading this, I had classmates afflicted by polio as a child. It was not unusual for parents to keep children from school, from going to the local swimming pool, and from other play activities. Because the spread of the virus was most active in the summer, it meant that the end of the school year was sort of a mixed blessing. My graduate studies in microbiology opened the world of virology to me. It was fascinating and exciting work during the 1950s. There were two polio vaccines to mark the beginning of a new era for virology. We could hope parents and children might not have the same fear of contracting polio we experienced just a decade earlier.

How did you translate that early work into your career at CDC, and then at the Task Force?

CDC gave me many opportunities to work in virology, studying several viruses, including polio. After committing years to laboratory research on respiratory viruses, I was assigned by CDC to direct the World Health Organization (WHO) International Influenza Center. I continued to be fascinated by the range of approaches that were emerging for the study of virology and most important, for the protection of communities from serious diseases caused by viruses. I was particularly interested in the impact of virus on respiratory systems, but polio always remained a fascination. It was around this time that the WHO launched the Expanded Program on Immunization against six childhood diseases, including polio. In 1984 a group of global health organizations, comprised of WHO, UNICEF, the Rockefeller Foundation, United Nations Development Program, and the World Bank established the Task Force to facilitate working together to accelerate the Program. This collaboration was a hallmark of the campaign because the support of these organizations would lead to more children being vaccinated. That was probably when we first started seeing the potential for global eradication of polio. In this way, my work for WHO led me directly to the Task Force.

How did you bring your experience to the Task Force?

When I came to the Task Force in 1994, I did so as part of my job with WHO. Specifically, I was to help build an international network, which later grew to 148 laboratories involved in surveillance and research. The eradication effort would rely on data from these key global laboratories. To ensure consistently high quality data worldwide, the laboratories needed to have a common system for organizing their work, controlling for variables, and reporting their findings. This early work with the laboratories at the Task Force led to new partnerships. For example, we worked alongside Rotary International as well as strengthening our ties to other NGOs and governments.

New Book Outlines ‘Partnership Pathway’

Mark L. Rosenberg MD, MPP, author of the book “Real Collaboration,” often introduces the book by comparing collaboration to a marriage. Says Rosenberg: “Collaboration is like a marriage in that it is very easy to get into, but very, very difficult to make it work.”

Published by the UC Press, “Real Collaboration: What it Takes for Global Health to Succeed,” was written with Task Force colleague Lisa Hayes and co-authors Margaret McIntyre and Nancy Neill.

Based on extensive interviews with global health leaders, the authors outline the “partnership pathway,” or the series of phases during the evolution of a collaborative relationship.

The book comes with a DVD that includes a series of worksheets as well as a film depicting highlights of the global health collaboration symposium convened by the Task Force in Fall 2007. With interviews and remarks by former President Jimmy Carter, a longtime Task Force supporter, and Task Force founder Dr. Bill Foege, along with scenes depicting the work of coalitions around the world, the film illustrates powerfully the book’s tenets about collaboration.

Real Collaboration is available through the Emory University Bookstore.
Are we close to eradicating polio?

The World Health Assembly passed a resolution to eradicate polio in 1988. At that time, there were over 350,000 cases of paralytic poliomyelitis in 125 countries. Today, only four countries in the world remain where polio has never been eliminated: Nigeria, India, Pakistan, and Afghanistan. The number of polio cases reported worldwide for 2010 (as of the week of May 17), is 202 compared to 1604 for the same week in 2009, reflecting dramatic progress in both Asia and Africa. Polio in India and Nigeria are at historic low levels. However, the situation remains fragile, with funding a concern. The current outbreak in Tajikistan serves as a reminder of the vulnerability of populations in many polio-free countries where immunization levels have decreased.

Why do we need to continue to vaccinate against polio in the US?

No polio outbreaks have occurred in this country for many years. But in 1952, just 3 years before the Salk vaccine became available, 58,000 cases of paralytic poliomyelitis were recorded in the summer, with most cases in children between 5 and 9 years of age. While that is a hallmark of the success of polio eradication efforts, we must maintain our guard and continue to be on alert to the return of this disease. The major threat to eradication is importations of poliovirus from endemic to polio-free areas where population immunity has been allowed to lapse. If we have effective vaccines, why are antiviral drugs needed?

There are two types of polio vaccines: the inactivated virus vaccine (Salk) that we now use in the US and many polio-free countries and the live attenuated vaccine (Sabin) that is used in much of the developing world. The Sabin oral polio vaccine is given by drops. It is the easiest to administer and is most effective in stopping poliovirus transmission. However, the Sabin vaccine is composed of weakened live viruses and vaccine coverage must remain very high to avoid continuous circulation in a population and the risk of the virus regaining paralytic potential. For this reason, WHO proposes to discontinue the routine use of Sabin vaccine once eradication is achieved.

However, rare persons with certain immune defects lack the capacity to rid the body of the vaccine virus and may continuously shed infectious virus for many years, posing a threat to themselves for eventual paralytic disease or to others after Sabin vaccine use has stopped. An antiviral drug to stop long-term virus shedding is the only solution.

What role does the Task Force play in poliovirus antiviral drug development?

Interestingly, the current work of the Task Force is very similar to the early role the organization played in facilitating the World Health Assembly’s polio eradication initiative in 1988. Today, the Task Force is the Secretariat for the Poliovirus Antivirals Initiative (PAI). PAI is a public/private partnership for antiviral drug development in the absence of commercial interests or funding.

As Secretariat, the Task Force convenes a Steering Team, subject-matter experts from government organizations, and sponsors (drug companies) to chart the way to develop an antiviral drug and to consider the role of poliovirus antivirals as part of the broader eradication effort. The primary PAI goal is to develop the most successful of drug candidates to the point where they can be safely and effectively employed as soon as possible to ensure the world is free and remains free of polio.

This work is reminiscent of the origins of the Task Force and the organization’s role in polio eradication in 1988. Through PAI, the Task Force facilitates collaboration among public and private sectors that reaches across agencies and disciplines.

Want More Information?

Contact Kymberlee Estis, Task Force Director of Communications and Development, at kestis@taskforce.org or 404.687.5611.

OR

Visit our new site, launching July 1

www.taskforce.org.
TEPHINET
Program Launches Online Network for Public Health

About 18 months ago, a Task Force program was looking for cost-effective solutions to share information and resources with a global network of public health fellows and a network of member programs around the world. The program, Training Programs in Epidemiology and Public Health Interventions Network, is better known as TEPHINET. The program mission is to support the network of field epidemiology training programs (FETPs) located in dozens of countries around the world.

With the advent of new technologies for information exchange, the TEPHINET program and CDC recognized the value of creating a robust online system for storing, retrieving, and sharing documents about lessons learned in the field. Not only would this be advantageous to the field epidemiology trainees and graduates, it would also be a useful resource for the public health practitioners around the world.

TEPHINET, in conjunction with their program partners at CDC and social networking experts, evaluated ways to make the program’s web site a better communications tool for its stakeholders. They examined the benefits of popular social networking sites to exchange information. Could TEPHINET provide a social network with the capacity to create an online community of users? Further, could the site enable fellows to engage in discussions, blog about their field experiences, share technical resources or publications, picture galleries, podcasting, and newsletters? Ideally, the site could enable users to publish or translate information into the many languages spoken by the site users and visitors.

The program found an answer in Drupal. Drupal is an open access software package that allows an individual, a community of users, or an enterprise to easily publish, manage, and organize a wide variety of content on a website. The software has a broad user base, which means there are many “experts” to support the application and online tools to guide users.

Earlier this year, TEPHINET launched the new program web site: www.tephinet.org. The new site premiers social networking tools for a new generation of information exchange in public health. The format for the site facilitates the exchange of resources and information. “Exchanging best practices is an important part of the fellowship experience,” says TEPHINET Program Director Dr. Dionisio Herrera. “Through the site, Fellows not only have a place to connect the dots between the practical learning of public health and real experiences, they also have a place to seek input and chronicle their experiences and that is our main objective: to develop and strengthen the network of practitioners and member programs.”

NTDs: Task Force is Nexus for Global Effort

Continued from page 1

Manager for the Task Force. The NTD offices are arranged in a neighborhood of peers and share a common work station along with meeting space.

There are many examples where the efficient exchange of resources and expertise helps the programs work more efficiently. “There is a definite advantage to walking down the hall to compare approaches with a colleague from another NTD program. We can look together at the data and brainstorm about the aggregate picture of disease incidence in a region,” notes Hopkins. “Even with a hectic travel schedule and the myriad of logistics we must tend to within our programs, it is good to have a reliable, expert network to call upon.”

NTD programs conduct several joint activities, drawing on the expertise of the internal network. “Activities such as mapping the prevalence of diseases, training drug managers and distributors, implementing drug delivery to target populations, monitoring and evaluation activities for the programs, and defining progress toward program goals are all enhanced by the ability to compare data and approaches,” notes Dr. Eric Ottesen, Director of the Lymphatic Filariasis Support Center. Ottesen has researched the potential of integration to improve the efficiencies of NTD programs and he uses that research to guide collaborations among the programs and outreach to external partners. “Co-location is not only convenient, but it can also make us more effective as a whole,” comments Ottesen.

Because the NTD programs plan and coordinate the distribution of donated pharmaceuticals to the recipient countries and non-government developmental organizations, the programs benefit from sharing resources and information about contacts in the government ministries, shipping arrangements, and distribution schedules. “It is not unusual for the logistics coordinator from the International Trachoma Initiative to provide logistics expertise to another program,” notes Dr. Danny Haddad, Director of the Task Force’s International Trachoma Initiative (ITI), which merged its operations into the Task Force last year. Haddad notes that this confluence of partners and programs is a primary reason ITI joined the Task Force. “The Task Force is known for building collaborations. The Task Force’s internal network of experts helps us be a better resource and partner.”

Kim Koporc, who directs the Task Force’s Children Without Worms program, saw the value in arranging a more formal discussion to synchronize the activities of the Task Force NTD programs. Last fall, she began convening her NTD colleagues for a monthly meeting. “We will always take the opportunity to walk across the hall, but the monthly luncheon has an agenda and that makes us look more closely and thoughtfully for opportunities for collaboration. In the luncheon, we try to anticipate where we might be able to share resources or save programs from duplicating efforts.”

One example cited by the group is the opportunity to share scheduling information for program meetings or trainings involving outside partners. Koporc notes, “When we are organizing a training meeting or a meeting of technical experts, it is useful to coordinate our efforts so we (the programs) can avoid meeting conflicts or schedule the meetings so that health officials can make one trip instead of two. We use our intranet to post upcoming meetings and list invited attendees. Because we have some of the same stakeholders, sharing this information helps us be more efficient and cost-effective.”

To date, the NTD programs have built successful internal and external collaborations to save the lives of millions. Their efforts provide resources such as the drug treatments, education, and training necessary to reduce the public health threat of some of the world’s deadly diseases. And what does it look like for the future? Rosenberg summarizes the next step: “In this time of funding crises and the demand for increased efficiencies, global health programs can only be effective if we continually look to each other for new ways and new collaborations to affect positively the quality of life for the world’s bottom billion.”