

INVOLVEMENT OF EMPLOYEES AND FORMER EMPLOYEES OF CDC IN THE EARLY YEARS OF THE CARTER CENTER AND IMPACT ON DIRECTION THE CENTER TOOK IN GLOBAL HEALTH

A QUESTION ARISES FROM A MEMBER OF NARFE

A member of the Centers for Disease Control and Prevention (CDC) Chapter of the National Association of Retired Federal Employees (NARFE) raised the question of the number of CDC employees involved in the early years of The Carter Center and the impact of these persons and CDC on the direction the Center took in global health.

That question stimulates even more basic questions: Why were CDC employees involved at all, and why did CDC have any influence on the direction taken by a former President of the United States in the work of his Presidential Center and its significant contributions to public health?

The questions arise because it is possible that Jimmy Carter may best be remembered for his post-Presidency leadership in global health, especially for taking on the challenge of eradicating Guinea worm disease (dracunculiasis) and leading other disease control/elimination efforts against some of the world's most neglected tropical diseases such as river blindness, trachoma, schistosomiasis, and lymphatic filariasis. Certainly he will also be remembered for many other notable achievements during his Presidency and post-Presidency. But only one disease, smallpox, had been eradicated by the conscious effort of humankind. And his new Center took on the world leadership role to eradicate Guinea worm – with the potential for its being the second disease to be eradicated.

What led him to do this? The major study (Global 2000) he ordered as President to identify probable changes in world population, natural resources, and the environment- to be used as the basis for future planning - and which he carried with him to his newly established Presidential Center, barely mentioned health, and certainly not global health.

FOUR FACTORS

Four factors stand out clearly as the answer:

1. The permanent national headquarters of the Centers for Disease Prevention and Control (CDC) were located in his home state.
2. While he was Governor of Georgia and President of the United States his wife, Rosalynn, was interested in some public health issues, including one related to CDC: immunization.
3. He was a true humanitarian and had a creative mindset very receptive to efforts to improve the quality of life for humankind, domestic or international.
4. He chose a former Director of CDC, Bill Foege, as Executive Director of his newly established Presidential Center.

These four factors will be interwoven in the discussion that follows. It will not be possible to identify all the CDC persons involved, nor will it be possible to identify all the outcomes and benefits of the unique relationship of CDC and The Carter Center. But one can use imagination and speculation to envision all the work going on in the background in a very complex relationship of organizations with some shared common purposes and with leaders with vision and passion for contributing to preventing, and controlling, and even eradicating the causes of unnecessary illness and death of persons in the U.S. and in other countries.

This document, somewhat disjointed at places, should be viewed as a draft – to be reviewed, corrected, modified, added to by anyone who has an interest in doing so. Many gaps would need to be filled to satisfy the purposes for which one may be reading. cursory statements are made about some events with significant long-term impact. The purpose of this document is to lay the base for a very unique situation in the history of politics and public health – a collegial working together of organizations in a way that facilitates reaching mutual goals – with the unprecedented support of a former President of the United States.

It seems fair to conclude that without CDC it is unlikely that The Carter Center would have prioritized health programs – other than mental health, also a focus of interest of Mrs. Carter, a co-founder of the Center.

Without CDC there would have been no Bill Foege to demonstrate the qualities that enticed a former President to engage him in health projects and ultimately choose him to lead his new Center.

Without Bill Foege , the Carter Center would not have had the health portfolio he brought along, with access to the broad array of expertise of current and former employees of CDC.

A primary reason for any involvement of CDC in the political life of Jimmy Carter began with the decision at the end of World War II to retain the corps of expertise developed to control malaria in training areas, primarily in the southeastern U.S. and to build an institution to combat other infectious diseases. The program, Malaria Control in War Areas (MCWA), would transform into a new government organization in the U.S. Public Health Service to be called the Communicable Disease Center (CDC) to be located in Atlanta, Georgia, in the same offices as the former MCWA. CDC was established on July 1, 1946, six days before a 20 year old Navy cadet from South Georgia, Jimmy Carter, married Rosalynn Smith. The following year the CEO of Coca Cola, Robert Woodruff, donated 15 acres beside Emory for construction of a facility to house the new health agency on a permanent basis.

That cadet was elected Governor of Georgia in 1971, 25 years after CDC was established. Gov. Carter was aware of CDC as a known asset to his state. The programs of the CDC had expanded significantly, and it had become renowned as the world's preeminent disease control/prevention agency. Mrs. Carter became interested in improving immunization rates of children, a priority of CDC, and was active in the effort to improve rates in Georgia.

With the support of CDC Director at that time, David Sencer, CDC was highly instrumental in the eradication of smallpox from the world. The last indigenously transmitted case occurred in 1977, the year Jimmy Carter became President, and eradication was subsequently certified by the World Health Organization (1980). A CDC Epidemic Intelligence Service Officer, Bill Foege, was known as the person who developed the pivotal strategy that enabled final success. He had been engaged in ridding West Africa of smallpox and was key to eradication in India.

That same year, 1977, after 11 years as Director of CDC, Sencer supported Foege as his successor. By that time CDC had ascended to be an agency of the U.S. Public Health Service on par with the NIH and FDA, and its programs had extended beyond infectious to include control/prevention of environmental, occupational, and other assaults on human health – many with international health components. Foege was Director of CDC during the Presidency of Jimmy Carter and for two years after.

In 1979 Foege was invited by the Assistant Secretary for Health and Surgeon General, Julius Richmond, to join him and Mrs. Carter on a trip to Thailand to review the status of health in Cambodian refugee camps. Foege was asked to write up the significant findings and brief Mrs. Carter during the return home trip. Later he presented the findings to President Carter at the White House – their first in-person interaction. This may have been the beginning of President Carter's respect for Foege that eventually led to selecting him to lead The Carter Center as Executive Director.

President Carter had to be impressed with the response of CDC, under Foege's leadership, to his specific request during his Presidency for dramatic improvement in immunization rates in the U.S., obviously occasioned by Mrs. Carter's continued interest. Foege charged Don Millar with leading the effort. An impressively higher level of improvement in rates than requested was reached.

TRANSITION PERIOD

Foege resigned from the position of Director of CDC in 1983 but continued with CDC at the request of the new Director, James Mason, as a strategic planning advisor. At the end of Foege's directorship, a unique happening became the seed of what is now the Task Force for Global Health, one of the largest and most contributing health organizations in the U.S. The Directors of the World Health Organization (WHO) and the United Nations International Childrens Emergency Fund (UNICEF) were aware that they did not work well together, that the concepts of program implementation of their organizations differed (vertical vs. horizontal), and that the effectiveness of their separate immunization programs suffered as a consequence. Together they came to Foege and asked if a task force to facilitate their efforts were formed would he agree to chair it. Foege agreed.

The Task Force for Child Survival was formed as a non-governmental organization in 1984 with the support of the World Bank, the Rockefeller Foundation, the United Nations Development

Program, WHO, and UNICEF. Mason agreed for him to spend significant time directing the Task Force.

An aside: In November 1984, while still a senior advisor to Mason, Foege hosted a visit by President Carter to CDC for a tour of laboratories and update on activities and issues. President Carter was a runner and agreed to add to the agenda a run with several CDC employees including Mark Rosenberg (future Director of the National Center for Injury Prevention and Control and future successor to Foege as Director of the Task Force for Child Survival – now the Task Force for Global Health), Jeff Koplan (future Director of CDC), Dennis Tolsma (Director of the Center for Health Promotion and Education), Nancy Hedemark (International Health Program Office), and Craig White (Epidemic Intelligence Service Officer). End of aside.

Foege formed a small secretariat for the Task Force, separate from CDC but composed of two CDC employees who agreed to join him: former long serving and highly respected Deputy Director of CDC, Bill Watson, and former Executive Assistant to the Director of CDC, Carol Walters. At Foege's request, the President of Emory University, Jim Laney, agreed to a contractual arrangement for administrative support. Reporting to the Director of CDC gave the Task Force access to the expertise resources of CDC; reporting to the President of Emory gave access to the resources of Emory.

All this is relevant, because when Foege left CDC in 1986 to assume the position as Executive Director of The Carter Center, he carried the Task Force with him, by agreement with President Carter. The Task Force was not an organizational component of The Carter Center but was housed at the new Center to allow Foege to provide direction to both organizations. It also provided for involvement of current and former CDC personnel on-site, working "seamlessly" as part of The Carter Center.

Another significant happening before the new facility was opened and Foege became Executive Director in 1986 was President Carter's decision to designate expert "Fellows" to take the lead for initiatives in his areas of interest. He was eager to get underway and leaned on Emory University experts for his initiatives in peace/conflict resolution and election monitoring. Foege accepted designation as Health Policy Fellow to provide advice and leadership for President Carter's interest, primarily domestic at the outset, in contributing to public health.

"CLOSING THE GAP" CONFERENCE

For example, Foege led the planning and served as project manager for a major conference in November 1984 on domestic health, "Closing the Gap." The conference was chaired by President Carter and the Assistant Secretary for Health, Ed Brandt. Was this an outgrowth of the development during his Administration and Foege's directorship of CDC of health goals to be achieved by 1990 and published (1979) as "Healthy People: The Surgeon General's Report on Health Promotion and Disease Prevention?" Much of that work was done at CDC. In any event, at the time of coordinating the "Closing the Gap" conference Foege was still employed by CDC and brought significant resources of CDC to make the conference a success.

A preliminary planning conference was held to determine priority precursors and interventions appropriate for possible Carter Center involvement and worthy of detailed consideration at the November conference for initiatives for domestic health. Jeff Koplan (a future Director of CDC), Eugene Gangarosa (former CDC), and Don Berreth (CDC) participated in determining the priority areas. Sixteen CDC employees authored 6 of the 15 papers presented in November, with a CDC project manager for 1 other paper.

The papers and CDC authors were:

Cardiovascular Disease – Craig White, Dennis Tolsma, Daniel McGee (+1)
Diabetes Mellitus – William Herman, Steven Teutsch, Linda Geiss
Infectious and Parasitic Diseases – John Bennett, Scott Holmberg, Martha Rogers, Steven Solomon
Respiratory Diseases – Laurence Farer, Carl Schieffelbein
Unintentional Injuries – Gordon Smith, Henry Falk
Violence, Homicide, Assault, and Suicide – Mark Rosenberg, Judith Conn (+6)
Alcohol Abuse – Thomas Welty (project manager)

This significant project was of obvious benefit to CDC as well as The Carter Center, and many other CDC staff were involved in development of materials for and review of the papers. When published the proceedings listed other non-author CDC current/former employees, including M. J. Adams, Donald Berreth, James Buehler, Eugene Gangarosa, Jeffrey Koplan, Brian McCarthy, and Godfrey Oakley. The authors included a special thanks to 50+ persons, primarily CDC employees, for assistance and review. For example, the infectious and parasitic disease authors thanked Miriam Alter, Libero Ajello, Larry Anderson, Paul Blake, Joel Bremen, Claire Broome (a future Deputy Director of CDC), Walter Dowdle (a future Deputy Director of CDC), John Feeley, Steven Hadler, Ann Hardy, George Healy, Kenneth Herrmann, Alan Hinman, James Hughes, Dennis Juranek, Robert Kaiser, Arnold Kaufmann, and William Winkler. Other authors also recognized similar input of a wide variety of CDC staff, attesting to the collegial atmosphere of CDC and The Carter Center's working together to achieve common goals.

When the proceedings were published, the first page was a letter from President Carter in which he stated: "By bringing together the nation's foremost experts on public health in a single meeting, we have tried to look at the major risks to good health in the U.S. today, to place them in their proper perspective, and then outline the preventive actions that could result in fewer deaths, saved dollars, improved health and quality of life, and greater productivity." The Foreword was written by Ed Brandt and the Preface by Bruce Dull (an Associate Director of CDC). The Introduction and Afterword were written by Foege and Robert Amler. A Cross-Sectional Analysis was written by Amler and Donald Eddins.

The summary of this conference is to illustrate that even before Foege became Executive Director of The Carter Center he was already engaged as leader for the health initiatives for the Center and in what he refers to as “shameless borrowing” of CDC staff. It only increased when he became Executive Director. He had a government organization that saw the benefit for progress toward mutual goals, and he had a former President who saw the benefit for what he wanted his Presidential Center to be – of benefit to humankind and bringing to fruition the middle phrase of the Center’s slogan (later developed): “Waging Peace, Fighting Disease, Building Hope.” CDC former/current employees could easily buy into the dynamics that led to inclusion of that middle phrase.

FOEGE – EXECUTIVE DIRECTOR

Foege was reluctant to take the position as Executive Director. He had his hands full directing the Task Force for Child Survival, and he had a passion for contributing to improvement in global health. The Carter Center was primarily focused on domestic health, and it had in place, or planned, major initiatives in peace, conflict resolution, election monitoring, etc. When President Carter realized the depth of this passion, he saw the value and offered to be supportive also of global health initiatives.

An interesting public step for President Carter to exhibit his general interest in public health was his presenting the opening speech at the annual meeting of the American Public Health Association (APHA) in 1986. Guess who was president of APHA that year? Foege.

Foege left the CDC payroll and became Executive Director of The Carter Center in 1986, assuming a much broader scope of responsibility beyond health. What a force he now had for accomplishment – a former President of the U.S.! And what a force the former President had.

THE TASK FORCE FOR CHILD SURVIVAL AT THE CARTER CENTER

As stated earlier, President Carter agreed to provide space in his new Center for the Secretariat of the Task Force for Child Survival. Foege still had a commitment to WHO, UNICEF, the World Bank, the Rockefeller Foundation, and the United Nations Development Program. Remarkable progress was being made in increasing immunization rates in developing countries, and activities of the Task Force were expanding.

Although the Task Force was never an organizational component of The Carter Center, its goals were consistent with President Carter and Mrs. Carter’s interest in immunization and the health of children, and they were behind it 100%. President Carter even identified with its accomplishments and occasionally took some credit for it. The first Annual Report (covering 1982-1988) prepared by The Carter Center Office of Communications, included a section on activities of the Task Force and listed its employees along with other employees of the Center.

As long as the Task Force was housed at the Center (through 1992) the Annual Report included a section on its activities and listed its primary employees.

THE FOEGE/WATSON DUO

Bill Watson was soon tapped to operate as Foegen's Deputy Executive Director of The Carter Center as well as his Deputy Director of the Task Force.

The Foegen/Watson duo was about as capable a team of leadership, management, vision, and charisma as a former President could ever hope to get. What did they bring to the table of benefit to him and his new Presidential Center?

- A mindset congruent with the goals of The Carter Center and the humanitarian leanings of the former President. They could be just as dedicated to accomplishing and expanding the goals of "Waging Peace; Fighting Disease; Building Hope" as they were to the goals at CDC.
- A mindset that major goals can be achieved – even with uncertainty at the outset and in remote, less developed, high obstacle, poverty-stricken, risky locations – a mindset gained from direct field experience in eradication of smallpox and involvement in resolution of many epidemics and public health issues, domestic and international.
- Extensive personal experience in working effectively with other countries – on site.
- Extensive experience in managing a large organization with multiple international programs – with staff in Atlanta and in most states and many countries.
- Awareness of the importance of bringing the best expertise, wherever it exists, to bear on an issue – including in-house staff, consultants, advisory committees, academia, other organizations.
- The program model of CDC of working with States and other countries – assignees worked as part of the state/county/big city health infrastructure to which they were assigned, not as a separate entity; they worked as part of the health ministry in a foreign country, not as a separate "NGO." They were members of the "local team" and accountable as such.
- The model included the components of what contributes to success of working with other countries – knowledge of the importance of providing as required: personnel, technical expertise, administrative expertise, financial support, supplies/equipment, training, etc.
- Knowledge of international health infrastructure – the UN organizations, ministries of health, the broad range of nongovernmental organizations, etc.
- Linkages with international health organizations.
- Access to CDC resources:
 - Expertise in neglected tropical diseases
 - Ability for detail of personnel as consultants or as field representatives

- Ability in strategic planning, problem solving, priority setting, and implementation of programs.
- Charismatic, visionary leadership, coupled with ability to delegate with confidence, that makes others feel part of the team, appreciated, supported, and respected.
- Competent management skills for working with all components of The Carter Center to facilitate maximum use of the technical expertise that exists in the specialty areas.

MORE ON THE TASK FORCE AT THE CARTER CENTER

Back to the Task Force for Child Survival and its unique presence in The Carter Center. Foege has written a whole book entitled The Task Force for Child Survival – Secrets of Successful Coalitions. It is an intensely exciting book to read, and details will not be repeated here. The relevance is that so many current and former CDC persons were involved as permanent staff and as consultants. They were in and out of The Carter Center just like Center staff. And President Carter occasionally referred to “my Task Force.” He was proud of it and helped make it effective, for example, making Carter Center facilities available for fund-raising for child survival, and being a featured speaker. Sometimes he attended Task Force meetings. Foege says that the operations of the two organizations were seamless, just as with CDC.

Some individuals had dual responsibilities, and some moved from one organization to the other. For example, Joe Giordano initially was a consultant with the Task Force but became the first Director of Operations for Global 2000 of The Carter Center and wound up being a major fund raiser for the Center. Tom Ortiz was Director of Operations of the Task Force for six years, beginning soon after the Task Force moved into The Carter Center. Carol Walters remained a member of the Board and served as Office Manager and Assistant Operating Officer for the expanding staff and scope of operations as long as the Task Force was part of The Carter Center. Betty Partin was secretary. Vicki Ledet (wife of CDC employee, Craig Withers – now Vice President of The Carter Center for Overseas Operations) was also a secretary. Some of the CDC persons involved in special projects or as consultants/employees were: John Bennet, Bruce Dull, Bill Muldoon, Stu Kingma, Wilmon Rushing, Walter Dowdle, Anne Mather, Seth Berkley, George Rubin, Hector Traveso, Larry Dodd, Mary Rowe (wife of CDC employee, David Rowe), Andy Agle (also later became Director of Operations for Global 2000), and others.

An interesting example of the intertwining of mutual goals of The Carter Center, The Task Force for Child Survival, and CDC occurred when an outbreak of measles in 1989 led Mrs. Carter to co-found with Betty Bumpers (wife of Dale Bumpers, former Senator and Governor of Arkansas) a separate non-profit organization called Every Child by Two. The purpose was to educate about the importance of immunization to prevention of diseases and to encourage completion of recommended primary vaccinations by age two. Bill Watson, Deputy Executive Director of both The Carter Center and the Task Force, worked with them. CDC detailed Bill Nelson, an employee in the National Immunization Program, to assist in their efforts. Every state was

visited to encourage elected and public health officials to adopt policies, pass enabling legislation, and establish coalitions to facilitate accomplishment of the goals of Every Child by Two – goals shared by all three organizations, and shared technical support of the new organization to accomplish them.

GLOBAL 2000, THE CARTER CENTER

President Carter established as the operating arm of The Carter Center for public health and agricultural programs an organization called Global 2000, an independent name considered at that time to be more fitting in the international setting for field activities than one honoring a former President. All the international health programs were implemented under this name, including agriculture with emphasis on nutrition and poverty reduction - not discussed in this document.

Joe Giordano would be the first Director of Operations, followed by Andy Agle, then Craig Withers (now the Vice President of The Carter Center for Overseas Operations) – a rather strong line of CDCers.

ENTER HOPKINS AND GUINEA WORM

Soon after becoming Executive Director, Foege brought Don Hopkins to The Carter Center, a move that may have cemented the primary legacy for which President Carter will be remembered. Hopkins had long been passionate about eradicating Guinea worm from the world – an objective almost impossible to envision, given the remote locations and extraordinary circumstances where the disease existed – and, with no immunization intervention, would rely primarily on behavior modification. This passion existed throughout his tenure at CDC as Assistant Director for International Health and as Deputy Director of CDC. He had been the persistent primary mover for getting resolutions by the World Health Organization in 1981 and 1986 (and later in 1989). The disease still existed in Pakistan, India, Yemen, and 19 African countries – long ignored and some in civil conflict.

President Carter had first heard of Guinea worm during a 5-day conference at The Carter Center in April 1986: “Risks Old and New: A Global Consultation on Health.” This conference was an extension into international health, using the same approach as the earlier “Closing the Gap” conference for domestic health. Foege assumed the position of Executive Director two weeks later, but it is obvious that his leadership was already underway. Participants included the President of Emory University; Director of UNICEF; Ministers of Health and officials from 27 countries in Africa, Asia, and Latin America; representatives of WHO, the World Bank, the Rockefeller Foundation; and others. Representatives of CDC included: Director James Mason and his deputy, Hopkins; and David Watkins. Peter Bourne, President of Global Water and former Medical Advisor to President Carter (also former husband of CDC employee, Judith

Rooks), made a presentation on Guinea worm and the Decade of Sanitation and Water Supply. President Carter was intrigued, and soon Hopkins, the driving force behind the eradication effort, was on the Global 2000 staff.

A relevant aside: Jimmy Carter, while President, asked Peter Bourne to do a report for him on what the U.S. was doing in international health and what more needed to be done. Bourne asked Foege for input as well as experts in other organizations, including NIH, in developing an inventory of U.S. government activities in international health and ideas for new involvements. Foege asked Hopkins to represent CDC in this effort. Hopkins was on a teaching assignment to Harvard at the time and commuted to/from Washington every Monday for several months to assist Bourne. Little action on the report occurred - other priorities dominated. The seed of interest, however, was there – and later ignited by Foege and kept burning by the involvement of other CDC persons and intensified by President Carter’s personal involvement in the programs, including visits to field sites and in using his political prestige to raise funds and obtain resources to support health programs and persuade other political leaders, including country presidents, to become personally involved in supporting eradication/control programs in their own countries.

GLOBAL HEALTH CONFERENCE – “RISKS OLD AND NEW”

The Carter Center held several conferences using the model of the “Closing the Gap” conference. Deliberations and outcomes of these conferences were significant contributions to public health planning beyond the scope of the Center.

The 1986 international health conference, “Risks Old and New, A Global Consultation on Health,” was a significant contribution of The Carter Center to evaluation of and highlighting the importance of preparing to deal with new risks in the modern age as well as old risks. Hopkins gave a keynote address on public health problems in developing countries. The papers used as background for discussion of existing and emerging global health problems in developing countries were prepared by current or former CDC personnel:

Overview – Robert Amler

Tobacco Products or Health – Dennis Tolsma

The Emerging Problem of Alcohol – Doug Klaucke

Infectious Diseases and Malnutrition – Eugene Gangarosa (Emory SPH; former CDC)

Reproductive Health – Roger Rochat (Emory SPH; former CDC)

Occupational and Environmental Hazards – Melvin Myers and A.L. Brown

Injury and Violence – Stuart Brown, Patrick O’Carroll, Mark Rosenberg, Martha Katz

Immunization – (prepared by Rockefeller Foundation)

Proceedings were prepared by Amler and two persons (Kamogi Anywar and Nancy Hedemark) in the Emory University Master of Public Health Program (now Rollins School of Public Health), a program initiated and developed with strong support of CDC.

An example of “shameless borrowing” in the unique collaboration of The Carter Center and CDC.

This is the conference mentioned earlier during which Bourne made the lunch-time presentation on Guinea worm that captured the attention of President Carter, ergo becoming the birth of Guinea worm eradication as a major international program of The Carter Center.

The “Closing the Gap” conference was also the model for a conference by The Carter Center’s conflict resolution program that brought together tobacco growers, agricultural groups, manufacturers, and others to discuss issues related to tobacco use. An offshoot of interest from this conference led to passage in 1986 of the Smokeless Tobacco Act. The Carter Center established a Tobacco Control Program to help prevent tobacco related disease and promote tobacco free societies.

HEALTH RISK APPRAISAL

Another significant contribution of The Carter Center was establishing a Health Risk Appraisal program in 1985 to work with CDC to refine the science base and improve the system developed earlier by CDC for physicians to be able to evaluate the risk of a person’s sustaining injury or developing a life-threatening disease. A symposium on “Healthier People” was held in 1987 with President Carter, the Surgeon General, and Assistant Secretary of Health introducing the updated health risk appraisal.

INTERNATIONAL TASK FORCE FOR DISEASE ERADICATION – ALL CHAIRS CDC

In 1988, two years after the new facility of The Carter Center was dedicated and opened, the Center established the International Task Force for Disease Eradication (ITFDE) with Foege as chair. He was succeeded as chair by Hopkins.

The purpose of the Task Force was/is to support eradication of Guinea worm and polio and evaluate the actual or potential eradicability of other diseases. The Task Force reviewed all diseases in Communicable Diseases in Man and considered what it would take to eradicate each. They came up with a short list that was printed in the CDC Morbidity and Mortality Weekly Report and later presented to WHO for consideration. The Task Force is still in existence today, and its deliberations/conclusions/recommendations continue to be influential in the consideration of priority health issues by domestic and international health organizations.

All chairs have been former CDC employees. Steve Blount, Director of Special Health Projects for The Carter Center (and former Associate Director of CDC for Global Health Development) followed Hopkins. Current chair is Kashef Ijaz, Vice President for Health Programs of The Carter Center (and former Principal Deputy Director of CDC's Center for Global Health). Numerous CDC persons have served as members, including three Directors and one Acting Director.

SYMPOSIUM ON RELIGION AND HEALTH

Another example of "beneficial beyond" the scope of program implementation by The Carter Center was a major symposium built on the model of "Closing the Gap" - held at the Center in 1989: "Striving for Fullness of Life: The Church's Challenge in Health." Contributors to the conference included CDC, the American Medical Association, Robert Wood Johnson Foundation, and several of the major national church organizations. President Carter stated in his introduction: "Churches, synagogues, and religious organizations have an important role to play in building self-respect and in teaching people to take an active role in leading a healthier life."

Foege was co-chair of the Steering Committee and the symposium. The symposium coordinator was Constance Conrad (first Program Director of Emory University's Community Health Program that developed with CDC support to become the School of Public Health; and wife of Lyle Conrad, the primary technical and logistical support at CDC for EIS officers deployed to field situations). Honorary co-chairs were President and Mrs. Carter and C. Everett Koop (former Surgeon General) – all also speakers.

Keynote speakers included Assistant Secretary for Health and former Director of CDC, James Mason, who presented on the science. Foege presented on what churches can do. Other presenters included Dennis Tolsma, Assistant Director, Public Health Practice, CDC, who had been involved with The Carter Center in development of the health risk appraisal system. CDC employees among the approximately 150 participants (including leaders from the major religious groups) included Walter Dowdle, Joyce Essien, Juarlyn Gaiter, Mike Kerr, and Gordon Robbins.

President Carter had a lot going on in his new Center in areas other than health – way too much to summarize, or even mention, for this brief statement on the early involvement of CDC. Keep in mind, the person working with President Carter on health issues from the initiation of The Carter Center was a former Director of CDC, still employed by CDC. That person became the Executive Director of the Center when it was opened and fully operational, with a former long-serving Deputy Director of CDC becoming Deputy Executive Director of the Center – both working directly with President Carter on ALL the broad array of the former President's interests in conflict resolution, peace, poverty reduction, mental health, agriculture, etc. - and later with another former Deputy Director (and long-serving Acting Director) of CDC, serving as Vice President of the Center for Health Programs.

HOPKINS, CDC, AND GUINEA WORM

Back to the major entry of The Carter Center into global health – Guinea worm. As stated earlier, Hopkins was the driving force for years for establishment of the eradication of Guinea worm as a goal. Due to his interest and leadership CDC became involved.

In 1977 the United Nations Water Conference, with 105 nations present, concluded that clean water is a basic human right. That decision led to designation of 1981-90 as the International Drinking Water Supply and Sanitation Decade. The goal was to support provision of clean drinking water and improve sanitation worldwide. Hopkins initially gave impetus to awareness of the benefit of action on Guinea worm by a letter he (with Foege as co-author) wrote in 1981 to the journal, Science, in which they pointed out that the only disease that could be entirely eliminated by provision of clean drinking water was Guinea worm. They recommended that villages with Guinea worm be identified and given priority for safe water. Guinea worm could then be a major measure of the success of the Decade. Bourne, former Medical Advisor to President Carter, concurred; and under his leadership with the United Nations as Chair of the Steering Committee for the Water Decade, this measure was accepted.

Also with persistent encouragement of Hopkins, WHO adopted resolutions for control and later eradication of the disease. The first major international conference on Guinea worm was held in 1982, and some progress was subsequently made in laying the basis for national programs. Hopkins and Ernesto Ruiz (Chief of the Helminthic Diseases Branch of CDC's Division of Parasitic Diseases and future Technical Director of The Carter Center Guinea Worm Eradication Program) led the effort to develop guidelines for national programs "to be," national plans of action, educational campaigns, chemical treatment of water, etc. India started a national program in 1984 that resulted in successful eradication in 1996.

In 1984 CDC was designated as a WHO Collaborating Center for Research, Training, and Control of Dracunculiasis (name later changed to "... Eradication of Dracunculiasis"). Hopkins was the first director and served until 1987 when its home became the Division of Parasitic Diseases, with Director of the Division, Bob Kaiser, becoming the next.

When Foege became Executive Director of The Carter Center in 1986 he formed, with full support of President Carter, a Guinea worm component as part of Global 2000, with Hopkins as principal consultant. President Carter was already interested in Guinea worm, as discussed above. A few months later Hopkins came to The Carter Center full-time to head up the challenge taken on by former President Carter. As a former head of International Health and Deputy Director of CDC he maintained strong linkages with CDC and brought the same access to resources as Foege.

DIRECTORS OF HEALTH PROGRAMS AT THE CARTER CENTER – ALL CDC

Since the beginning of The Carter Center the principal leader for health programs has been a former CDC employee. When Foege left the Center in 1992 Hopkins picked up the banner. His position title changed in 1997 to Associate Executive Director for Health Programs and in 2007 to Vice President for Health Programs.

He was followed as Vice President in 2016 by Dean Sienko, a former CDC EIS Officer who spent most of his career as an epidemiologist at the Michigan Department of Public Health and as Commanding General of the Army Public Health Command. Sienko was followed by Kashef Ijaz who became VP in 2020 after 18 years at CDC, most recently as Principal Deputy Director, Division of Global Health Protection, Center for Global Health. He was a CDC EIS Officer who also served in other positions in the Center for Global Health and the Center for HIV, STD, and TB Prevention. The health programs of The Carter Center have been under the leadership of an employee (including Foege's first years as Health Policy Fellow) or former employee of CDC since the Center was formed in 1982.

DIRECTORS OF OPERATIONS FOR GLOBAL 2000 – ALL CDC

Similarly the Director of Operations (later "Director, Program Support") for Global 2000, the operating arm of The Carter Center for health and agriculture programs has been a former CDC employee since the Center was formed. The first Director was Joe Giordano (c. 4 years), followed by Andy Agle, (9 years), then Craig Withers (continuing until now as Vice President of The Carter Center for Overseas Operations).

Several CDC persons were in the Global 2000 operations office during the first few years, including Hopkins and Jack Benson as consultants. Rubina Imtiaz (first Pakistani to complete EIS training) was hired by The Carter Center upon graduation and served as Medical Epidemiologist for six years before going back to CDC. Interestingly, she later served several years with the Task Force for Global Health (successor organization to the Task Force for Child Survival) – an example of the fluidity of CDC - The Carter Center - Task Force.

FIRST TECHNICAL DIRECTORS OF HEALTH PROGRAMS (EXCEPT MENTAL HEALTH) – ALL CDC

The first Technical Directors of the expanding health programs were all current or former CDC employees.

A. GUINEA WORM – HOPKINS AND RUIZ

Beginning in 1987 Hopkins was the Senior Consultant for Global 2000 and essentially the first Technical Director for the Guinea worm program, the flagship health program of The Carter Center. In early 1992 when he became leader of all the health programs at the Center, he was

succeeded as Technical Director by Ruiz. Ruiz had long been involved with Guinea worm and attended the first international meeting on Guinea worm in 1982. He resigned from the position of Chief of the CDC Helminthic Diseases Branch in 1983 and became the unofficial leader of the “task force” for Guinea worm eradication that was formed at CDC by Hopkins. The group consisted primarily of persons in the Division of Parasitic Diseases (Director, Bob Kaiser) in the Center for Infectious Diseases (Director, Walter Dowdle), including Karl Kappus, Frank Richards, Mike Schultz, Peter Schantz, Dennis Juranek, Jimmy Stewart, Jim Sullivan, and others. Much background work was done in anticipation of WHO’s agreement to declare eradication of Guinea worm as a goal, including developing guidelines on Guinea worm programs “to be,” national plans of action, education, chemical treatment of water, etc.

CDC started a publication in 1983 entitled “Guinea Worm Wrap-up.” The 300th issue was published in July 2023. When CDC became a WHO Collaborating Center for Research, Training, and Control of Dracunculiasis in 1984, the Collaborating Center assumed responsibility for the “Wrap-up.” For years now it has been a joint publication of CDC and The Carter Center as the major organ for reporting major activities and progress. From the beginning Directors of the Collaborating Center have worked closely with The Carter Center on all aspects of Guinea worm eradication. Directors of the Collaborating Center have been Don Hopkins, Bob Kaiser, Trenton Ruebush, Daniel Colley, Mark Eberhard, and Sharon Roy.

From the outset of involvement of Global 2000/The Carter Center, and as national programs were starting up, Ruiz and others in CDC (such as Seth Leibler, Ann Parkland, and Cathy Shoemaker and many of the expert staff listed elsewhere) also worked closely with the Center in many areas, including the development of training materials, written and visual, for persons working from national to village levels (also involved: United Nations Development Program [UNDP] and USAID). A major film, “Guinea Worm, The Fiery Serpent,” was developed by CDC, The Carter Center, UNICEF, and UNDP. The CDC WHO Collaborating Center (Director, Kaiser) with involvement of Ruiz, an employee of CDC at the time, developed in collaboration with The Carter Center a 5-day course for district level workers and “evaluation, planning, and surveillance guidelines” to assist national authorities mount national programs. CDC and the Center drew up a Global Strategic Plan of Action.

FIRST FIELD ASSIGNEES AS RESIDENT TECHNICAL ADVISORS – CURRENT OR FORMER CDC

When The Carter Center assumed responsibility in 1986 to lead the eradication effort, Guinea worm was endemic in India, Yemen, Pakistan, and 19 countries in Africa. As program efforts got underway CDC personnel were deployed in many instances to determine the extent of the disease and to help with startup. In most instances when countries established a formal program, current or former CDC personnel were the first or early assignees to be Resident Technical Advisors. Frequently CDC consultants were deployed to assist the permanent assignee.

To maximize progress The Carter Center applied the same approach as CDC applies to working with States and big cities in the U.S.: assign a person permanently to work as part of the Ministry of Health, not as a separate non-governmental organization.

The first permanent assignee was Jim Andersen to Pakistan in early 1987. While still an employee of CDC, Jim had conducted an immunization survey in Sierra Leone at the request of Joe Giordano on behalf of the Task Force for Child Survival, headquartered in The Carter Center. He was then asked to join the Guinea worm eradication program and made an initial trip to Pakistan with Foege. Rubina Imtiaz, a CDC EIS Officer, was already gathering surveillance data on Guinea worm in the country and stayed involved until the program ended. Ruiz and Barney Cline (EIS Officer who succeeded Ruiz as Chief of the Helminthic Diseases Branch and later became Dean of the School of Public Health at Tulane) had previously done exploratory and preparatory work in Pakistan. Earlier Frank Richards (later head of The Carter Center programs initiated to combat river blindness, schistosomiasis, lymphatic filariasis, and malaria) and Joel Bremen (later head of the WHO teams to assess and certify eradication of Guinea worm from countries reporting 0 cases) had gone to Pakistan to evaluate a USAID malaria project (headed by former CDCers). At the request of Hopkins, they also assessed the Guinea worm situation in their free time. They found evidence in Ministry of Health and WHO surveillance reports that tens of thousands of cases existed.

In November 1986 President Carter visited Pakistan and talked with General Zia, President of Pakistan, and got his approval for The Carter Center to provide assistance. A delegation from Pakistan subsequently came to the Center for discussion. Foege (recently appointed Executive Director of the Center), President Carter, and Bourne attended the meeting along with CDC experts including Hopkins (soon to join the Center), Bob Kaiser, Barney Cline, Ruiz, Richards, Karl Kappus, Harrison Spencer, Jim Sullivan, Jimmy Stewart, Mark Eberhard, and others. Agreement on details of assistance was confirmed. A plaque hangs on the wall outside the Zaban Room in which they met denoting it as the historic location where the field operations of The Carter Center for the eradication of Guinea worm began.

Jim Andersen retired from CDC and moved to Pakistan in 1987. Imtiaz was based at The Carter Center in Atlanta but was frequently on-site to help get the program up and running, with initial assistance of CDC EIS Officer, Ted Bailey, and periodic visits from CDC consultants Ruiz and Cline. The program was successful in eliminating the disease, becoming the first country to be certified free of Guinea worm (1997, 3 years after the last case).

DATES OF CASE SEARCHES AND SUBSEQUENT ASSIGNMENT OF RESIDENT TECHNICAL ADVISOR

Over a period of time (1987-1993) the endemic countries conducted country-wide, village by village, case searches and determined locations and extent of the disease. Some merited assignment of a Resident Technical Advisor (also referred to as Country Representative) to work

within the Ministry of Health with a National Coordinator appointed by the Ministry. In each country to which an Advisor was assigned the Ministry of Health formed an Executive Secretariat and received supporting funds from The Carter Center.

Following is a list of the dates of the first case searches of countries that eventually resulted in the assignment by The Carter Center of a Resident Technical Advisor and to which CDC persons were assigned in the early years, in order of successive assignment. The dates of assignment do not necessarily coincide with the dates of case searches. Current or former CDC personnel were the first assignees to the most highly endemic countries, and the list below lists only the countries to which CDC personnel were assigned – some assignments lasted several years. Initial Technical Advisors in a few other countries were selected country health staff, and some of the countries below eventually were served by country health personnel.

1987

Pakistan Jim Andersen

1988

Nigeria Craig Withers, Pat McConnon, Mike Street, Wayne Duncan

1989

Ghana Dave Newberry (assigned late 1987), Larry Dodd (assigned 1989 when case searches began), Pat O'Mara, Michael Pupamplu, Nwando Diallo (joined CDC later), Elvin Hilyer (Northern Region)

1991

Mali Aaron Zee, Bradley Barker

Niger Leslie Chase, Jim Zingesser

Uganda Rita Malki, Elvin Hilyer, Mark Pelletier

1992 (Assignments began in 1995 shortly after cease-fire arranged by President Carter)

Sudan (Khartoum) Ross Cox (temporary to open office), Craig Withers, Elvin Hilyer,
Mike Street, Mark Pelletier

Sudan (Nairobi - serving South Sudan) Pat McConnon (temporary to organize for beginning of
program), Roger Follas (temporary to open office), Ross Cox, Bruce Ross

CDC PERSONNEL CONTRIBUTING TO GUINEA WORM ERADICATION

In addition to the long-term assignment of persons, The Carter Center and CDC provided consultants frequently on a temporary basis to support programs. Among those most active were Jason Weisfeld, Karl Kappus, Mark LaPointe, Larry Dodd, and Harry Godfrey.

Ruiz, who followed Hopkins as Technical Director of The Carter Center program for eradication of Guinea worm, provided the following lists of CDC persons contributing to the eradication effort (some updates have been made).

FORMER OR SECONDED CDC STAFF CONTRIBUTING AS PART OF THE CARTER CENTER STAFF

CR = Country Representative (Resident) of G2000/The Carter Center
as Former CDC or on IPA from CDC
Number is Order of Assignment to Country

- Agle, Andrew 2nd Director of Operations, Global 2000, The Carter Center
- Andersen, James D 1st CR, Pakistan
- Barker, Bradley 2nd CR, Mali
- Chase, Leslie 1st CR, Niger
- Christie, Graham Consultant, Ghana
- Cox, Ross 1st CR, (South) Sudan (Nairobi Office); opened office in Khartoum
- Dodd, Larry 2nd CR, Ghana
- Duncan, Wayne 4th CR, Nigeria
- Eberhard, Mark* Director, Division of Parasitic Diseases; Consultant
- Foege, William* Executive Director of The Carter Center
- Follas, Roger Tech. Advisor – opened office in Nairobi
- Giordano, Joseph 1st Director of Operations, Global 2000, The Carter Center
- Godfrey, Harry Tech. advisor
- Guagliardo, Sarah Anne Epidemiologist, The Carter Center
- Hilyer, Elvin 2nd CR, Uganda; 2nd CR, Sudan; Ghana – Northern Region
- Hopkins, Donald* Vice President, Health Programs, The Carter Center
- Ijaz, Kashef Vice President, Health Programs, The Carter Center
- Kramer, Michael
- Lapointe, Mark Tech. advisor
- Malki, Rita 1st CR, Uganda
- McConnon Patrick 2nd CR, Nigeria)
- Newberry, Dave 1st CR, Ghana
- O'Mara, Patrick 3rd CR, Ghana)
- Pelletier, Mark 3rd CR, Uganda; 4th CR, Sudan
- Pupamplu, Emmanuel 4th CR, Ghana
- Richards, Frank O* Technical Director, River Blindness Control Program (+ Schistosomiasis, Lymphatic Filariasis, and Malaria)
- Ross, Bruce 2nd CR (South) Sudan (Nairobi Office)
- Ruiz-Tiben, Ernesto* Technical Director, Guinea Worm Eradication Program (GWEP)
- Street, Michael 3rd CR, Nigeria; 3rd CR, Sudan
- Sienko, Dean Vice President, Health Programs, The Carter Center
- Torres-Valez, Fernando J. Associate Director for Research, GWEP
- Weisfeld, Jason* Former EIS Officer; field consultation in several countries

- Withers, Craig P. 1st CR, Nigeria; 1st Regional Consultant, Francophone Africa; 1st CR, Sudan; 3rd Director of Operations, Global 2000; now Vice President, Overseas Operations, The Carter Center
- Zee, Aaron 1st CR, Mali
- Jim Zingeser 2nd CR, Niger; Senior Epidemiologist, The Carter Center; Technical Director, Trachoma Control Program

*Contributing long before The Carter Center took lead

CARTER CENTER PERSONNEL WHO BECAME CDC EMPLOYEES

- Becknell, Steven Technical Assistant, Ghana; South Sudan
- Diallo, Nwando Assistant to Technical Director, Guinea Worm, The Carter Center; 5th CR, Ghana
- Duggar, Christopher
- Imtiaz, Rubina EIS Officer; Medical Epidemiologist at The Carter Center; significant role in initiating 1st program in Pakistan
- Ting, James

OTHER CDC STAFF CONTRIBUTING BEFORE AND AFTER THE CARTER CENTER TOOK LEAD

- Amon, Joseph
- Archer, Roodly (EIS Officer)
- Ashford, David
- Ted Bailey (EIS Officer)
- Barwick, Rachel (EIS Officer)
- Bimi, L. (Ghanaian Guest Researcher at Division of Parasitic Diseases (DPD))
- Bishop, Henry
- Blount, Stephen (Associate Director of CDC for Global Health Development ; later Special Projects Manager, Task Force for Child Survival, housed at The Carter Center)
- Brandt, Floy H.
- Bremen, Joel (later co-chair of the WHO International Commission for the Certification of Dracunculiasis Eradication)
- Cama, Viataliano A.
- Cline, Barnett L.
- Colley, Daniel (Director DPD)
- Dowdle Walter (Director, Center for Infectious Diseases)
- El Bcheraoui, Charbel
- Fitzgerald, Steven
- Freeman A. R.
- Glenshaw, Mary T.
- Hightower A. (Statistician DPD)
- Hochberg, Natasha (EIS Officer)
- Jones, T. Steven
- Kachur, Patrick

- Kaiser, Robert (Director DPD)
- Kappus, Karl D. Extensive field consultation in several countries
- Seth Leibler
- Lieu, Eugene W. (EIS Officer)
- Long Earl, G.
- Maguire, James H.
- McKnight, Jason (EIS Officer)
- Mintz, Eric (EIS Officer)
- Parise, Monica (Current Director DPD)
- Ann Parkland
- Pieniazek, N.J.
- Priest, Jeffery W. (Immunologist DPD)
- Phuc Nguyen-Dinh
- Roy, Sharon
- Ruebush, Trenton K.
- Russell, Sara (EIS Officer)
- Sapp, Sarah G.H.
- Schultz, Myron
- Scott, Janet
- Shoemaker, Cathy
- Sircar, Anita D.
- Spencer, Harrison
- Sreenivasan, Nandini (EIS Officer)
- Stewart, James
- Sullivan, James
- Thiele, Elizabeth A.*
- Waldman, Ronald
- Wallace, Sarah V.
- Walldorf, Jenny A.
- Weniger, Bruce
- Weisskopf, Marc (EIS Officer)

EXTRAORDINARY INVOLVEMENT OF PRESIDENT CARTER

From the beginning in 1986 President Carter has been a dedicated leader/supporter in the Guinea worm eradication effort. He has used his prestige and influence as former President to engage the support and direct involvement of current and former Presidents of endemic countries. He has made numerous visits to villages in endemic countries, bringing attention to the importance of the effort. He has personally participated in periodic reviews of country programs. He negotiated a cease-fire in Sudan for progress to be made. He has raised funds from individuals, foundations, and governments and in-kind donations from businesses to support a full-fledged program for success in what seems an insurmountable goal. Since his Center took on the task of eradicating Guinea worm in 1986 the number of human cases worldwide has decreased from an estimated 3.5 million to 13 reported in 2022.

B. RIVER BLINDNESS – FRANK RICHARDS

Foege was the portal by which The Carter Center became involved in another major global health program – river blindness (onchocerciasis). When it was discovered that ivermectin (Mectizan[®]) was effective in the prevention of river blindness, Roy Vagelos, CEO and Chair of the Board of Directors of Merck & Co., made the extraordinary decision to donate the drug for use wherever it was needed and for whatever time it was necessary. Merck asked Foege if the Task Force for Child Survival would take on responsibility to administer the distribution and if he would chair an expert committee to provide guidance for the distribution. Foege agreed, and the Mectizan Donation Program and the Mectizan Expert Committee were established in 1988.

Bruce Dull and Stu Kingma were added to the Task Force to assist Foege in running the committee. Kaiser designated Richards, a member of the Division of Parasitic Diseases staff, to represent CDC on the committee. Richards had considerable international experience. He had attended the first international meeting on Guinea worm in 1982, and as previously mentioned he, along with Bremen, assessed the Guinea worm situation in Pakistan before Jim Andersen was assigned. He had also done Guinea worm assessments in Burkina Faso, Niger, Mali, and Cameroon. Richards would eventually become head of The Carter Center program against river blindness.

The principles for distribution included a requirement for country approval, with ministries of health and other assistive organizations eligible to apply to participate, including the countries in West Africa involved in the existing Onchocerciasis Control Program (OCP), but expanding beyond throughout Africa. The OCP had focused on controlling the black fly vector that passed the disease from human to human. The new WHO African Program for Onchocerciasis Program (APOC) would focus on stopping the disease with Mectizan. President Carter became interested and visited Chad in 1994 with Hopkins and Vagelos. He saw cases of river blindness and became instrumental in raising funds to support the new expanded APOC. He attended the launch of this new program at the World Bank in 1995.

That same year, 1995, President Carter got agreement from the President of Sudan and the principal rebel leaders for a 2 month cease fire (extended to 4 months and effectively honored another 2 months) to permit progress to be made against Guinea worm. Other health actions were possible also, including distribution of Mectizan for the first time in South Sudan. Richards was called upon by the Mectizan Donation Program and Hopkins (then Vice President of The Carter Center for Health Programs) to go to South Sudan and help implement the distribution.

Soon after Richards returned from South Sudan, Hopkins requested that he be detailed from CDC to The Carter Center to set up a river blindness program. Dan Colley, Director of CDC's Division of Parasitic Diseases Division, supported his detail. In 1996 The Carter Center launched the Global 2000 River Blindness Program, taking on the operations of the River Blindness Foundation in six Latin American countries as well as Nigeria, Cameroon, and Uganda.

Richards went on full-time detail to The Carter Center as Technical Director of the new program, still with CDC, but with salary reimbursed by the Center to CDC. He brought valuable experience and knowledge to the position, including familiarity with the River Blindness Foundation programs. He had worked with the founder of the Foundation, John Moores, as a recipient of grants to support his work while he was stationed earlier in Guatemala by CDC. He also made several trips for the Foundation to support its programs in Nigeria. Moores succeeded President Carter in 2005 as chair of The Carter Center board of trustees.

After seven years Richards went back to CDC to satisfy the non-detail requirement for retirement. He retired from CDC in 2005 and returned to The Carter Center as a full employee of the Center for the first time. Hopkins had held the position open during the two years of his return to CDC. A grand example of the “interplay” between CDC and The Carter Center. Richards served as Director of the River Blindness Program for an additional 15 years during which additional diseases came into play.

C. SCHISTOSOMIASIS, LYMPHATIC FILARIASIS, MALARIA – RICHARDS

Work of the International Task Force for Disease Eradication, mentioned earlier, led to involvement in programs to assist ministries of health in select areas to combat lymphatic filariasis, schistosomiasis, and malaria. All these programs were conducted under the directorship of Richards.

A note to illustrate the impact of successful programs by The Carter Center and the inspiration of a positive decision by one company on the decision of another, plus an involved former President. As discussed earlier Merck & Co. made the historic decision to donate Mectizan for treatment to prevent river blindness. Foege was chairing a meeting of the Mectizan Expert Committee in France during which the representative of WHO presented a study which showed that the addition to Mectizan of Albendazole, a drug made by another pharmaceutical company (SmithKline Beecham), had a positive effect on lymphatic filariasis. This was exciting news, but no one knew any of the top officials of SmithKline Beecham to approach regarding a donation which would be required to start a program against lymphatic filariasis.

The next morning Foege interrupted the meeting to take a call from President Carter who said he had had dinner the evening before with Jan Leschley, the CEO of a pharmaceutical company. The CEO said he was impressed with what Merck & Co. had done and asked if President Carter could suggest anything they could do. That company was SmithKline Beecham, the maker of Albendazole! Foege told President Carter of the study results, and by the end of that day President Carter had a donation commitment from Leschley. After a period of time to study potential side effects of using both drugs, The Carter Center was able to launch a program against another “neglected tropical disease.”

In almost all instances field activities in these new programs were integrated and conducted by the same village based volunteers, following the model of the Guinea worm eradication program. The common denominator was education and village based (often house to house) distribution of donated medicines (primarily) or, in the case of malaria, insecticidal bed nets.

By the time Richards retired from The Carter Center in 2020, volunteers in all the programs collectively, including river blindness, had delivered more than a half billion treatments in 11 countries in the Americas and Africa and distributed more than 18 million bed nets in two countries in Africa. Four countries in the Americas were verified free of river blindness. It was possible to stop mass administration of drugs in parts of 9 countries where transmission had been eliminated or interrupted.

Progress continues under the directorship of Richards' successor, Gregory Noland, an epidemiologist with The Carter Center for several years and a former guest researcher at CDC for three years (1998-2001). Richards continues as Senior Advisor.

D. TRACHOMA – JIM ZINGESER

The Carter Center's launch of a Trachoma Control Program comes later - 1998 in four African countries, later expanded to seven. It bears mention, however, since it involved another Technical Director from CDC - Jim Zingeser. While a CDC EIS Officer (veterinarian) Zingeser had done the first mission (1989) to Togo to assess the Guinea worm situation. Six years later he left CDC to join The Carter Center as Country Representative in Niger for the Guinea Worm Eradication Program. After three years in Niger he continued service in Atlanta as Senior Epidemiologist for the Center.

When the Conrad Hilton Foundation provided support to The Carter Center to initiate a Trachoma Control Program, Zingeser became the first Technical Director in 1998. President Carter obtained significant support of Lions Club International for a long-term program. Zithromax®, an antibiotic produced by Pfizer Inc., was effective against the bacteria that caused the conjunctivitis in eyes that was the basis of transmission by fly vector from human to human. President Carter, accompanied by Jim Ervin, the President of Lions Club International, visited William Steere, CEO of Pfizer, and obtained a commitment for donation of Zithromax® for country programs – similar to the commitment made by Merck for donation of Mectizan® for river blindness.

Zingeser provided leadership for establishment and strengthening of country programs until his return to CDC in 2004, after almost 10 years with The Carter Center. He was seconded by CDC to WHO for polio eradication with base in Copenhagen, and then seconded by CDC as liaison to the UN Food and Agriculture Organization in Rome.

In 2016, after 12 years with CDC in these secondment positions, he returned to The Carter Center as an advisor in the Guinea Worm Eradication Program; his expertise as a veterinarian and an epidemiologist was needed. Guinea worm was on the verge of eradication with very few human cases remaining, but the disease was surprisingly found in dogs, baboons, and feral cats – a serious threat to eradication success. Research and new approaches were needed.

After three and a half years Zingeser is now back on the staff of CDC's Center for Global Health – his changing employment status another grand example of the “interplay” between CDC and The Carter Center.

E. MENTAL HEALTH – MRS. CARTER

Clearly, without any influence of CDC The Carter Center would have pursued a major program in mental health due to the interest and active leadership of Mrs. Carter. It is unlikely that without CDC the programs discussed above would have become part of his legacy.

A POSITIVE AVENUE FOR EXPANSION OF THE GLOBAL PUBLIC HEALTH WORKFORCE

Another paper could be written about the beneficial role of The Carter Center in recruiting and providing developmental opportunities for non-CDC persons (U.S. citizens and foreign nationals) for work in global public health. Some who worked in field positions advanced to positions of greater responsibility at The Carter Center. Some obtained advanced degrees in public health and continue to contribute at The Carter Center or elsewhere in a variety of settings, including United Nations organizations and the Task Force for Global Health. Some have gone on to work for CDC. Many of the key health positions at The Carter Center initially held by current or former CDC persons are now held by persons with no history of work with CDC. This includes the current directors and most staff of the Guinea worm and trachoma programs. The avenue of expansion of the public health workforce opened by The Carter Center is a very positive result of the direction the Center took in global health.

CLOSING COMMENTS

Much, much more could be written about the question raised by a NARFE member. This statement was not meant to be exhaustive on events/programs mentioned, nor to cover all, but it is probably reasonably responsive to the question and enough to portray a unique and historic coming together of a remarkable public health organization and many of its exceptionally talented and dedicated staff with a former President of the United States who is extraordinarily committed to improving life on this earth for humankind.

In his book, [Beyond the White House](#), President Carter commented on the direction his Center took. He said: "One of my biggest surprises during the past quarter century has been the ever-increasing commitment of The Carter Center to preventing and eradicating tropical diseases."

The press release of the Norwegian Nobel Committee announcing the award of the 2002 Nobel Peace Prize to President Carter recognized his "outstanding commitment to human rights" and his "untiring effort to find peaceful solutions to international conflicts." It also stated: "He has worked hard on many fronts to fight tropical diseases and to bring growth and progress in developing countries."

The Nobel Committee member who gave the award ceremony speech on December 10, 2002, in Oslo, Norway, stated: "As if mediation, human rights, and disarmament were not enough The Carter Center has in cooperation with other organizations headed a number of health campaigns. So far the best results have been achieved in the fight against Guinea worm infection....Having overcome smallpox, the world is now on the verge of exterminating another

major epidemic disease....The Carter Center also reports considerable progress in the fight against river blindness....”

Foege and Hopkins were among the guests of President and Mrs. Carter in Oslo to attend the awards ceremony and the celebratory reception hosted by the Carters.

Enough said for CDC’s being in President Carter’s back yard and his having a wife interested in immunization, having a mindset of determination to improve life for humankind, and latching onto a visionary former Director of CDC as Executive Director of his new Center.

If you see errors that need to be corrected or are aware of omission of significant information related to the question in the first paragraph of this document, feel free to provide comments/information to elvin3865@gmail.com.

My apologies to all the “Drs.” for non-use of the title – it was not practical to determine that status for all, and it was awkward to use for some and not others.

Prepared by Elvin Hilyer
September 2023

RECOMMENDED:

FOR MORE DETAILED INFORMATION ON THE PROGRAMS AND DISEASES MENTIONED ABOVE

Website for The Carter Center: cartercenter.org (click on Health Programs)

FOR MORE INFORMATION ON INVOLVEMENT OF PRESIDENT CARTER

[Beyond the White House](#) by Jimmy Carter (2007)

[The Unfinished Presidency](#) by Douglas Brinkley (1998)

FOR AN EXCITING PUBLIC HEALTH STORY

[The Task Force for Child Survival – Secrets of Successful Coalitions](#) by William H. Foege (2018)