

EYE of the EAGLE

THE
CARTER CENTER



Volume 16, Number 1

Winter 2015

What's Inside

2

Ecuador Achieves
Onchocerciasis Elimination

3

Moore Receives
Mectizan Award

4

Center Celebrates 200
Million Treatments

5

Ethiopia Onchocerciasis
Committee Sets Strategy

7

Center Aims for More
SAFE Effectiveness

8

Graphic Shows Statistics
on Trachoma Burden

10

Trichiasis Surgeon Named
Program Officer; Nash
Joins Trachoma Program

11

Survey Shows 600,000
Nigerians Free of LF

12

Carter Center Welcomes
New CEO

IACO 2014 Notes Achievements, New Partnership

Over 80 public health professionals, experts, partners, and donors attended the 24th annual InterAmerican Conference on Onchocerciasis, held Nov. 13–14, 2014, in Mexico City. The theme of the meeting was:

“After 80 years of work, Mexico celebrates success, and the region intensifies efforts in the Yanomami area.” The minister of health, Dr. Mercedes Juan, announced that the Mexican Ministry of Health had submitted Mexico’s request for verification of onchocerciasis elimination to the World Health Organization (WHO). Guatemala has also met the requirements to submit a request to WHO and is preparing to do so. Both are following in the footsteps of Colombia and Ecuador, which received WHO verification of onchocerciasis elimination in 2013 and 2014, respectively (see p. 2).

At the meeting, former U.S. President Jimmy Carter congratulated Mexico and the region for program achievements and celebrated a new partnership with the Carlos Slim Foundation. *continues on page 2*



The Carter Center/G. Aguilar

At a special event at Museo Soumaya in Mexico City, President Carter and Carlos Slim announced a new funding partnership between the Carlos Slim Foundation and The Carter Center for onchocerciasis elimination in the Americas.

Trachoma Surveys Require Rethinking for Design, Resource Efficiencies

As the global map of trachoma nears completion, attention is being given to scaling-up intervention and assessing impact. Countries must quickly scale-up and intensify interventions to meet the target of global elimination of blinding trachoma by 2020. To this end, impact assessments, conducted every three to five years as prescribed by the World Health Organization (WHO), are critical tools to identify progress toward the elimination target

and to identify areas requiring prioritization. Impact assessments must be conducted swiftly and efficiently to allow sufficient time to plan and implement interventions.

The Carter Center has supported trachoma impact surveys at the district and subdistrict levels in over 300 domains in six countries since 2008. The surveys have employed community-based, cluster-random sample designs, though the exact methodology used has been continuously modified after considering epidemiology and statistics, as well as feasibility of implementation.

continues on page 6

Electronic
Edition

To receive this newsletter via email only, please send a request to guinea.worm@emory.edu.

IACO in Mexico

continued from page 1

Slim Foundation, which has pledged \$6.9 million for the Carter Center's Onchocerciasis Elimination Program for the Americas (OEPA).

In addition to President Carter and Dr. Juan, special guests included the secretary of health surveillance of Brazil, Dr. Jarbas Barbosa da Silva Jr.; and the vice minister of health of Venezuela, Dr. Claudia Morón.

In conjunction with the IACO

meeting, the vice ministers of health from Brazil and Venezuela—the two countries that share the last active onchocerciasis-endemic area in the Americas—met to discuss the execution of their binational agreement, which formalizes their willingness to work together to address this disease focus, known as the Yanomami area, along their shared border in the Amazon jungle. Drs. Barbosa and Morón addressed the conference and shared their commitment to put an end to the disease once and for all.

Since 1996, the Carter Center's OEPA has worked with the ministries of health of the six countries in the Americas affected by onchocerciasis to eliminate this disease. Other major donors to OEPA include Merck and the Mectizan Donation Program, the U.S. Agency for International Development, the U.S. Centers for Disease Control and Prevention, Lions Clubs International Foundation, and the Bill & Melinda Gates Foundation, among others.

Two Down, Four to Go: Ecuador Achieves Onchocerciasis Elimination

The Carter Center congratulates

President Rafael Correa and the people of Ecuador on the occasion of their country becoming the second in the world to be verified by the World Health Organization (WHO) as having eliminated onchocerciasis (also known as river blindness). Dr. Carina Vance, minister of health of Ecuador, announced the achievement during the opening session of the 53rd Pan American Health Organization (PAHO) Directing Council in Washington, D.C., on Sept. 29, 2014. In 2013, Colombia became the first

country officially verified by WHO as free of onchocerciasis.

Ecuador's Ministry of Health had distributed Mectizan®, donated by Merck, since 1990, using the regionally recommended strategy of twice-yearly community-wide mass drug administration and health education for all people in the affected areas. In 2010, mass drug administration was halted after transmission of onchocerciasis in the country was successfully interrupted. An evaluation conducted in 2012 at the end of the three-year post-treatment surveillance period showed no infected black fly vectors. Based on these results, Ecuador applied for formal verification of elimination of the disease from WHO in July 2013. A WHO international verification team visited Ecuador in May 2014, and on Sept. 22, 2014, Director-General Dr. Margaret Chan provided Ecuador with official notification that WHO had verified elimination of the disease.

"The elimination of onchocerciasis is another step toward reducing poverty in Ecuador and is a significant improvement in Ecuadorians' quality of life," said Dr. Vance. "Ecuador will continue its fight to eliminate so-called

diseases of poverty to achieve a good life for all."

"Together with The Carter Center and international partners, Rosalynn and I want to congratulate Ecuador for wiping out river blindness and showing that eliminating this disease from the Americas is possible," said former U.S. President Jimmy Carter. The Carter Center works with partners throughout Latin America to eliminate the disease through its Onchocerciasis Elimination Program for the Americas.

Ecuador is one of six countries in the Americas that have been working to eliminate onchocerciasis since 1992. It was considered to be a particular challenge given the efficiency of the Ecuadorian black fly vector at transmitting river blindness. The other four countries are Brazil, Guatemala, Mexico, and Venezuela. Guatemala and Mexico have both interrupted disease transmission nationwide and successfully completed their post-treatment surveillance period. Both countries are now preparing their official requests to WHO for verification. Transmission of onchocerciasis in the Americas only continues on the border of Brazil and Venezuela.



Dr. Carina Vance, minister of health of Ecuador, addresses the 53rd PAHO Directing Council.

Moore's Receives Mectizan Award for River Blindness Work

John J. Moore's Sr., trustee emeritus of The Carter Center, received the 2014 Merck Mectizan Award at a ceremony during November's InterAmerican Conference on Onchocerciasis.

Moore's had the vision to see the Mectizan Donation Program as a tool to relieve suffering and, as a businessman, he recognized that providing resources for this cause would deliver an enormous return on the investment.

The annual award is given to individuals who have demonstrated an extraordinary level of commitment to fighting river blindness or lymphatic filariasis.

John Moore's founded the River Blindness Foundation in 1990 after reading an article in the *Houston Chronicle* about the late Dr. William Baldwin's efforts to raise money to buy a van to travel through the Americas to distribute Mectizan,[®] which had been donated by Merck in 1987 to all who need it for as long as needed. At the time, strategies and mechanisms to get the drug out to the millions of people who needed it were being developed by the Mectizan Expert Committee, but progress was slow. The donation of a drug on such a massive scale was unprecedented.

When Moore's learned of Dr. Baldwin's mission to get the drug distributed in Latin America, he founded the River Blindness Foundation. He donated an estimated \$25 million to not only fulfill Dr. Baldwin's vision

for the Americas and establish the Onchocerciasis Elimination Program for the Americas, but to also establish country programs in Cameroon, Nigeria, and Uganda. The foundation also set up partnerships with other nongovernmental organizations and bilateral funding agencies working on river blindness control including CBM, Africare, Sightsavers, International Eye Foundation, Lions Club International Foundation, the InterAmerican Development Bank, and USAID, to name a few.

In 1995, Moore's transferred the River Blindness Foundation opera-

has been significant progress in the Americas, where the disease has been eliminated from two countries and the remaining four countries are close to eliminating river blindness from the region.

Moore's had the vision to see the Mectizan Donation Program as a tool to relieve suffering and, as a businessman, he recognized that providing resources for this cause would deliver an enormous return on the investment. Today, nearly 25 years after the River Blindness Foundation was established, millions no longer suffer from the disease, and the possibility of



John Moore's addresses the audience at the InterAmerican Conference on Onchocerciasis after receiving the Merck Mectizan Award in November.

tions to The Carter Center, where its legacy continues to flourish. In 2014, The Carter Center celebrated its 200 millionth assisted treatment and continues to facilitate the delivery of over 20 million treatments annually. There

eliminating river blindness globally is becoming a reality.

Editor's Note: The content in this article was provided by the Mectizan Donation Program.

Carter Center Celebrates 200 Million Mectizan Treatments

On Aug. 12, 2014, The Carter Center celebrated in Uganda with partners the organization's 200 millionth assisted Mectizan® treatment.



Christopher Olanya received the Carter Center's 200 millionth treatment of Mectizan at a ceremony in Uganda last August.

The 200 millionth treatment was administered by a community distributor in the Wigweng community of Mura Parish to Christopher Olanya, a man blinded by onchocerciasis. Later, the 200-million-and-first treatment was given to Nancy Akanyo, a 14-year-old girl who enthusiastically addressed the crowd about the virtues of the mass drug administration program. After traditional dances, a skit provided health education messages about taking medicines to prevent river blindness and the other neglected tropical diseases like lymphatic filariasis, schistosomiasis, and soil-transmitted intestinal worms.

The Lamwo district of Uganda was chosen for the celebration because of its remarkable local leadership, which led to a dramatic increase in mass drug administration coverage—from 30 percent in 2013 to 90 percent in 2014.

Lamwo is part of the large Madi-Mid North focus. With a total population at risk of 1.5 million, it is the largest active focus of onchocerciasis transmission in Uganda, and it will be the greatest challenge as Uganda works to eliminate river blindness nationwide.

In his address to the crowd, Dr. Frank Richards of The Carter Center said: "When a young girl named Nancy Akanyo spoke to us, who could not have been greatly impressed by her outgoing character, energy, talent, and intelligence? We would all agree that she has a bright future, one that we will not let be destroyed by river blindness, or any other neglected tropical disease.

The future is bright, if we seize the opportunity to improve these treatment programs in northern Uganda."



At the ceremony in Uganda celebrating the 200 millionth Carter Center-assisted treatment of Mectizan, children perform a drama about taking the medication to prevent river blindness.

Among the over 100 participants in the ceremony were Carter Center representatives Dr. Frank Richards, Dr. Moses Katarwa, Peace Habomugisha, and Lauri Hudson-Davis. The guest of honor was the Lamwo district chairman, Mathew Ochen Akiya. Also present were Ministry of Health officials Dr. Edridah Tukahebwa and Tom Lakwo; Lions Polly K. Ndyarugahi, Night Ndyarugahi, Israel Manzi, and Yesse Muhanguzi; and Dr. Ambrose Onapa, RTI/ENVISION country representative.

By assisting in the administration of Mectizan, the Center has helped six countries in the Americas, where efforts to eliminate river blindness have been so successful that 96 percent of Mectizan treatments have been stopped, and four of the six countries appear to have completely eliminated the disease. The Center has also helped deliver Mectizan in Nigeria, Cameroon, Sudan, South Sudan, Ethiopia, and Uganda.

Ethiopia Onchocerciasis Committee Sets Elimination Strategy

The Ethiopia Onchocerciasis Elimination Expert Advisory Committee

Committee, an official advisory group to the Federal Ministry of Health of Ethiopia, held its first meeting in Addis Ababa, Oct. 6–8, 2014. The committee, composed of national and international experts, is tasked with providing the Ethiopia Federal Ministry of Health with a road map to nationwide interruption of onchocerciasis transmission by 2020, with World Health Organization verification as a goal shortly thereafter.

Dr. Kebede Worku, Ethiopian minister of state for health, presided over the meeting on the first day, and opening addresses were made by Dr. Pierre M'Pele-Kilebou of the World Health Organization and the Honorable World Laureate Dr. Tebebe Berhan of Lions Clubs. The Carter Center and its Lions partners have agreed to support the meetings of the advisory committee for the next three years. The committee is modeled on a highly successful one in Uganda.

The key outcomes of the inaugural meeting were as follows: (a) Ethiopia will have guidelines that use the road map phases outlined in the World Health Organization Geneva 2001/2013 onchocerciasis elimination guidelines; (b) the program should institute twice-per-year mass drug administration in all newly discovered and untreated active transmission areas; and (c) the program should switch from annual to twice-per-year treatments in all treated areas where slow progress would preclude reaching the 2020 goal. The committee also recommended that national mapping be completed as rapidly as possible to detect other undiscovered or unrecognized areas of active onchocerciasis transmission so that these can be

offered mass drug administration as quickly as possible. Mapping is important, particularly in eastern Ethiopia. The meeting ended with the commit-

The committee is tasked with providing the Ethiopia Federal Ministry of Health with a road map to nationwide interruption of onchocerciasis transmission by 2020.

tee members agreeing to complete a detailed review of the Federal Ministry of Health's national guidelines for verifying elimination of onchocerciasis before the next meeting in 2015.

Dr. Mark Eberhard, former director of the Division of Parasitic Diseases and Malaria at the U.S. Centers for

Disease Control and Prevention, was elected chairperson. Oumer Shafi of the Federal Ministry of Health and Dr. Zerihun Tadesse of The Carter Center are co-secretaries of the committee. Other key participants in the meeting included Dr. Tom Unnasch, University of South Florida and chairman of the Uganda onchocerciasis committee; Dr. Jean-Baptiste Rongou, director, African Program for Onchocerciasis Control; Abdissa Kurkie, Federal Ministry of Health; Adugna Wayesa, Ethiopia Public Health Institute; Dr. Adrian Hopkins, Mectizan Donation Program; Dr. Moses Boakerie and Rory Post, Liverpool School of Tropical Medicine; Dr. Teshome Gebre-Michael, Addis Ababa University; Scott McPherson, RTI/ENVISION/USAID; and Alphonse Renz, University of Turbingen.



Participating in the first meeting of the Ethiopia Onchocerciasis Elimination Expert Advisory Committee are Dr. Mark Eberhard (center), committee chairman; Oumer Shafi (right), committee co-secretary and Federal Ministry of Health neglected tropical diseases coordinator; and Dr. Zerihun Tadesse, committee co-secretary and Carter Center country representative.

Trachoma Impact Surveys

continued from page 1

Current guidelines suggest surveys include 30 clusters per domain, each with at least 50 children ages 1 to 9 years, to provide robust estimates to assess impact for trachoma, a highly localized disease. However, new research has shown that there may be little increased power by visiting more than 18 clusters per domain when evaluating low levels of trachomatous inflammation-follicular (TF) among children ages 1 to 9 years.

Experience has taught that the feasibility of survey implementation as well as epidemiology and statistics must be considered when determining survey methodology. Specifically, survey teams, supervisors, and support staff must receive adequate training prior to the launch of each survey and

must be available to support field work in its entirety. Survey costs must also be considered. They vary considerably by country, ranging from US \$2,088 to US \$9,112 per domain and US \$116–\$531 per cluster. Evidence from national trachoma programs suggests that about 75 percent of all trachoma impact survey costs are attributable to personnel and transportation.

Finally, time must be considered. First, surveys must be executed at least six months after the last mass drug administration but also scheduled to allow sufficient time to process results, request additional drugs, and plan for the next mass drug administration, if warranted. Seasonality, cultural and religious events, and migration also should be considered allowing for a relatively short time frame in which a survey can be conducted. Second, and

most important, is the amount of time required to complete training and field work. Randomly selected survey clusters can be extremely remote, in some cases requiring over two days to walk to reach a village. Field teams participating in Carter Center–supported

Survey teams, supervisors, and support staff must receive adequate training prior to the launch of each survey and must be available to support field work in its entirety.

surveys have spent over 660 cumulative days, almost two years, conducting impact surveys.

While surveys must be appropriately designed to generate reliable estimates, the feasibility of survey implementation must also be considered. This is particularly important when considering future surveys, as required by the current WHO guidelines, which stipulate Carter Center–supported programs should survey, at a minimum, 1,048 domains, estimated to cost US \$7,400,000–\$12,300,000 and require over 2,300 days, equivalent to over six years. Opportunities to reduce time and costs to improve efficiencies are warranted, particularly given that in addition to conducting surveys, program interventions must be fully implemented and, in many areas, intensified to meet the elimination targets by 2020.



A trachoma grader examines the eyelid for clinical signs of trachoma in Amhara, Ethiopia.

Center Aims for More SAFE Effectiveness in High-Prevalence Areas

Great strides have been made in reducing the burden of active trachoma within the Amhara region of Ethiopia since the implementation of the SAFE strategy for trachoma. Endorsed by the World Health Organization (WHO), the SAFE strategy stands for surgery, antibiotics, facial cleanliness, and environmental improvements. The prevalence of trichomatous inflammation follicular (TF) in children ages 1 to 9 years—one indicator of active trachoma—has gone from 39.1 percent in 2007 before the SAFE strategy was introduced to a prevalence of 25.9 percent as measured in recent trachoma impact surveys, a 34 percent reduction. Other trachoma-related outcomes, such as trichomatous inflammation intense (TI) and trichomatous scarring (TS), were also reduced greatly, by 85 percent and 35 percent, respectively, since 2007.

Despite the positive results within Amhara as a whole, there has been substantial variability throughout the region, with individual zonal TF prevalence ranging from 16 to 51 percent in 2014. One example where trachoma prevalence remains stubbornly high is the South Gondar zone in West Amhara. Within this zone, the prevalence of TF in children 1 to 9 years was 66.6 percent in 2003 during the baseline assessment (see Figure 1). By 2007, the prevalence of TF dropped to 28.9 percent in this age group, a statistically significant decrease. However, since 2007, the prevalence has leveled off, and in 2014 is estimated at 27.5 percent. Despite five to seven years of annual mass drug administration in South Gondar zone, the prevalence of TF remains high, and no individual districts within this zone have achieved the WHO target of TF

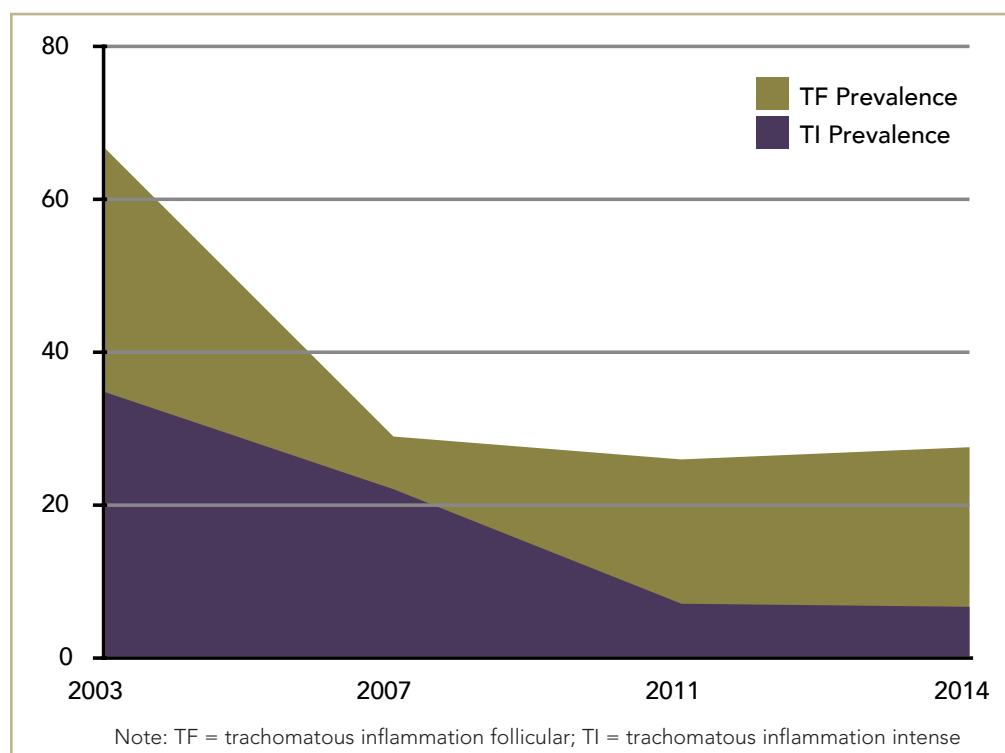


Figure 1: TF and TI Prevalence in Children Ages 1 to 9 Years, South Gondar Zone, Amhara Region, Ethiopia

prevalence of less than 5 percent.

WHO guidelines call for annual mass drug administration for all individuals within areas where the prevalence of TF remains high—greater than 10 percent. In many areas, annual mass drug admin-

Despite five to seven years of annual mass drug administration in South Gondar zone, the prevalence of TF remains high.

istration has been very effective, and disease modeling has predicted the annual drug administration should be able to drastically reduce or eliminate blinding trachoma, at least in areas with moderate to low trachoma prevalence. However, in hyperendemic areas, one MDA a year may not be

sufficient. Given the experiences in South Gondar zone and others in Amhara region, it is clear that other strategies need to be developed to improve the effectiveness of the SAFE strategy.

The Carter Center, in collaboration with various partners including the Amhara Regional Health Bureau, is currently developing a cluster-randomized controlled trial within hyperendemic areas of Amhara region to test a more comprehensive treatment approach. This approach will encompass a more intense, targeted regimen for mass drug administration in close connection with a renewed focus on community-driven sanitation, water, and hygiene improvements with a goal of attaining sustainably low levels of infection leading to a much reduced prevalence of TF.

This infographic was originally published in the article "Trachoma in Ethiopia: From auction to action" in issue 6 of Philanthropy Age, an Abu Dhabi-based publication that focuses on philanthropic activities in the Middle East, North Africa, and South Asia. Reporter Adrienne Cernigoj traveled to the Amhara

region of Ethiopia with The Carter Center and the Noor Dubai Foundation to cover the 12th trachoma mass drug administration launch in May 2014. Noor Dubai generously helps to support the Carter Center's implementation of the full SAFE strategy in the Amhara region.

Treating trachoma

Trachoma is the world's leading cause of preventable blindness, a symptom of poverty that burdens the whole family. Only behavioural change can eradicate it, but treatment can alleviate the suffering

Global burden

21.4 million

The number of people the UN health agency estimates are affected by trachoma globally

6 million

The number of people globally blind from the disease

2020

The target year by which the UN's health agency wants to eliminate blinding trachoma

30–40 years old

The age range in which trichiasis typically occurs, following repeated infections

Trachoma in Amhara, Ethiopia

18.2 million

The number of people reached by the programme each year with antibiotics

1.2 million

The number of people in Ethiopia estimated to be affected by trichiasis, the blinding form of trachoma

60 per cent

The proportion of the population at risk of contracting trachoma

85 per cent

The level of antibiotic drug administration coverage needed to protect the population

* 2011 data

All data: The Carter Center.

\$2.9bn

WHO's estimated economic cost per year of trachoma, from lost productivity

\$15.4m*

Cost of The Carter Center's Trachoma Control Programme active in six countries – Mali, Niger, Nigeria, Sudan, South Sudan and Ethiopia

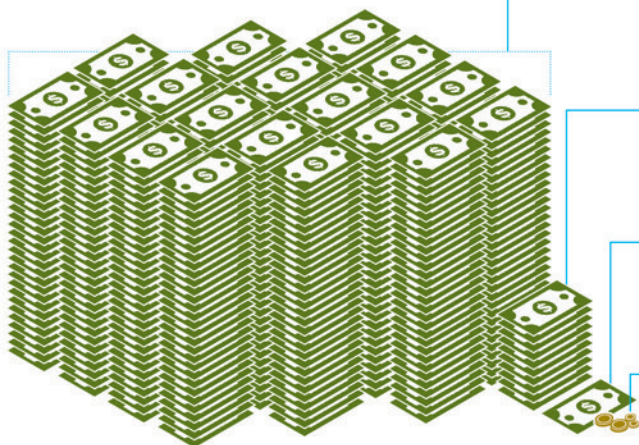
Credit: Philanthropy Age

Treating the infection in Amhara...



93,690,641

The total number of azithromycin antibiotic doses – Pfizer's Zithromax – distributed between 2000 and 2013



\$1.8bn

The total estimated value of the Zithromax donated by Pfizer

\$11,500*

The market rate to provide 450 people with antibiotic treatment

\$100*

The programme's cost to reach 450 people with antibiotic treatment

\$0.22*

The cost to provide antibiotic treatment to one person



25,000

The number of Health Extension Workers needed for one MalTra Week

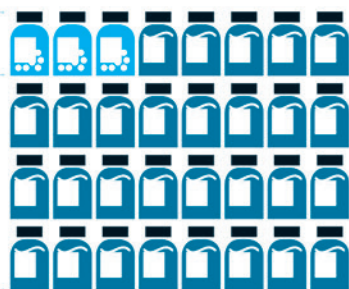
23

The number of lorries needed to take the medication out to the districts from the capital, Addis Ababa



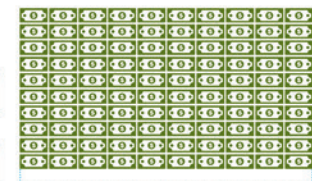
31,584

Number of bottles of Zithromax distributed in one MalTra Week. Each bottle contains 500 tablets



282,576

Number of bottles of Zithromax liquid suspension, or syrup for under-fives, distributed in one MalTra Week. Each bottle is 30ml



\$1m*

The cost of logistics and operations to cover one half of Amhara

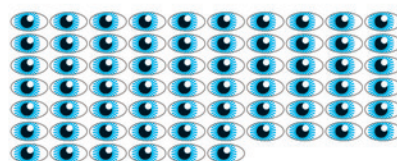
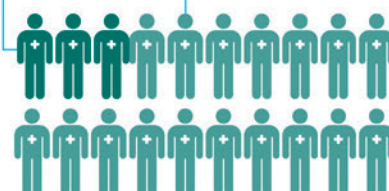
... And restoring sight

144

The number of local surgeons trained in 2012

1,000

The number of local surgeons that need to be trained each year to meet the backlog



66,766

People received eye surgeries in 2012

317,678

The number of people the programme has helped receive trichiasis surgery through 2013

299,751

The current backlog of people requiring trichiasis surgery



\$250*

The cost of one trichiasis surgery kit, which includes needles, sutures and a scalpel. The consumable items last for between 150 and 200 surgeries

Former Trichiasis Surgeon Named Trachoma Program Officer



Belay Bayissasse

Almost 10 years after being trained to perform life-changing eyelid surgery for patients with trichomatous trichiasis (TT), Belay Bayissasse has been named

the new trachoma program officer for The Carter Center in Ethiopia.

Since 2000, The Carter Center in Ethiopia has supported trachoma control activities in the Amhara region, an area that harbors the greatest known burden of trachoma worldwide. While preventing active disease is an essential component of the trachoma program, surgeons are essential for operating on patients with trichiasis, or advanced trachoma, to halt the progression toward blindness. In the Amhara region, nurses trained to perform TT surgery deliver the free service to patients at health centers and during outreach campaigns.

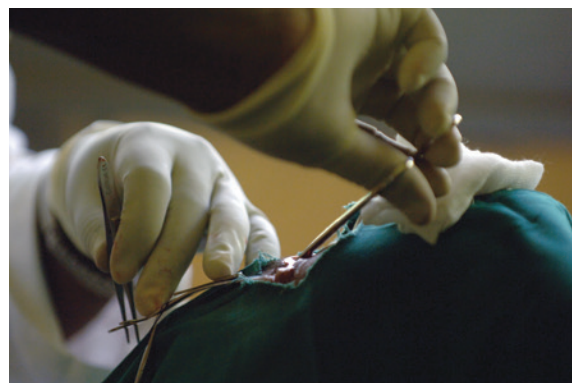
Bayissasse is a member of the cadre of almost 1,000 surgeons who have been trained in Amhara since the program's inception. Bayissasse recalled he knew little about trachoma

prior to participating in surgeon training in 2005. Although challenged by a limited supply of surgical consumables and instruments, Bayissasse embraced the practice, recalling that "helping TT patients and [receiving positive] feedback from operated TT patients motivated me to do more."

Bayissasse served as a trichiasis surgeon in Amhara for two years until he resigned to pursue a teaching position at a health sciences college in 2006. Since then, Bayissasse has worked in the public health sphere with nongovernmental organizations and is also pursuing his Master of Public Health degree with a focus on monitoring and evaluation from Mekele University and the Addis Continental Institute of Public Health.

Bayissasse's early experience tackling trachoma as a TT surgeon stuck with him. Motivated to contribute to the effort to eliminate blinding trachoma from Amhara and Ethiopia, Bayissasse was thrilled to have the opportunity to again support the Trachoma Control Program in Amhara

with the Carter Center's Ethiopia team. He is encouraged by the program changes he has observed, including greater community awareness about the disease, ample supply of surgical consumables and instruments, and increased latrine promotion, construction, and use. Much progress has been made since Bayissasse's surgeon training course in 2005, although much remains to be done to achieve the target of global elimination of blinding trachoma by 2020. Drawing upon his experience as a TT surgeon almost 10 years ago, Bayissasse aims to apply those formative lessons to support the program in the Amhara region and throughout Ethiopia.



Eyelid surgery, such as the one pictured above, relieves the pain of the most advanced stage of trachoma. Bayissasse performed such surgery for two years.

Aisha Stewart

Vanessa Vick

Dr. Scott Nash Joins Trachoma Program as Epidemiologist

The Carter Center's Trachoma Control Program has named Dr. Scott Nash as program epidemiologist. Most recently, Dr. Nash served as a postdoctoral research fellow at the National Institutes of Health, where he conducted analyses using data from several cohort studies in Tanzania and Mali that focused on malaria mortality and morbidity among pregnant women and young children. His

epidemiological experience includes global health research in sub-Saharan Africa, including a study on the role of environmental factors on the presence of blinding trachoma in Tanzania. He also served as an HIV/AIDS and biology educator while serving as a U.S. Peace Corps volunteer for two years in rural Tanzania. Dr. Nash earned both a Master of

Science and Doctorate in Population Health Sciences from the University of Wisconsin-Madison, where he researched the etiology of age-related hearing impairment and macular degeneration using data from two large longitudinal studies of the aging senses. He also holds a Bachelor of Science in education and zoology from the University of Wisconsin-Madison.

Survey Shows 600,000 People in Plateau, Nasarawa Free of LF

Lymphatic Filariasis (LF) is a mosquito-transmitted parasitic disease that causes grotesque swelling of the legs and genitals, often called elephantiasis. A June 2014 survey by the Nigerian Ministry of Health and led by Carter Center epidemiologist Dr. Greg Noland demonstrated that four local government areas of Plateau and Nasarawa states remain free of LF transmission four years after halting mass drug administration (MDA) with Mectizan,[®] donated by Merck, and albendazole, donated by GlaxoSmithKline. Approximately 600,000 people reside in these four areas.

The areas of Jos North, Langtang South, Keana, and Keffi stopped MDA in 2010 after seven years when surveys showed that the prevalence of LF infection, as measured by a blood test for filarial antigen, was below the 2 percent threshold required for breaking transmission. World Health Organization guidelines stipulated that additional filarial antigen blood surveys be conducted after stopping MDA to ensure that LF mosquito transmission will not recur after the intervention is halted. The recommended method is to conduct a transmission assessment survey in children ages 6–7 years old. Of 1,759 children sampled across the four local government areas, only 2 (0.11 percent) were LF antigen positive; less than 20 positives is the threshold for success. Results indicate that the four areas remain free of sustainable LF transmission.

Baseline LF mapping conducted in 1999–2000 revealed that all 30 local government areas in the two-state Plateau and Nasarawa area were endemic for LF. By 2003, all 30 areas were receiving annual MDA, and

in 2010, long-lasting insecticidal nets were distributed by the Ministry of Health and The Carter Center to fight LF and malaria. MDA was stopped throughout the two-state area in 2013 and post-MDA surveys are planned in an expanded number of local government areas in 2015.

The Carter Center is proud to be a partner with Nigeria in eliminating the scourge of LF from 600,000 people forever.



Children in Nigeria's Plateau and Nasarawa states no longer need to fear lymphatic filariasis.

Gregory S. Noland

Update on Cases of Guinea Worm Disease

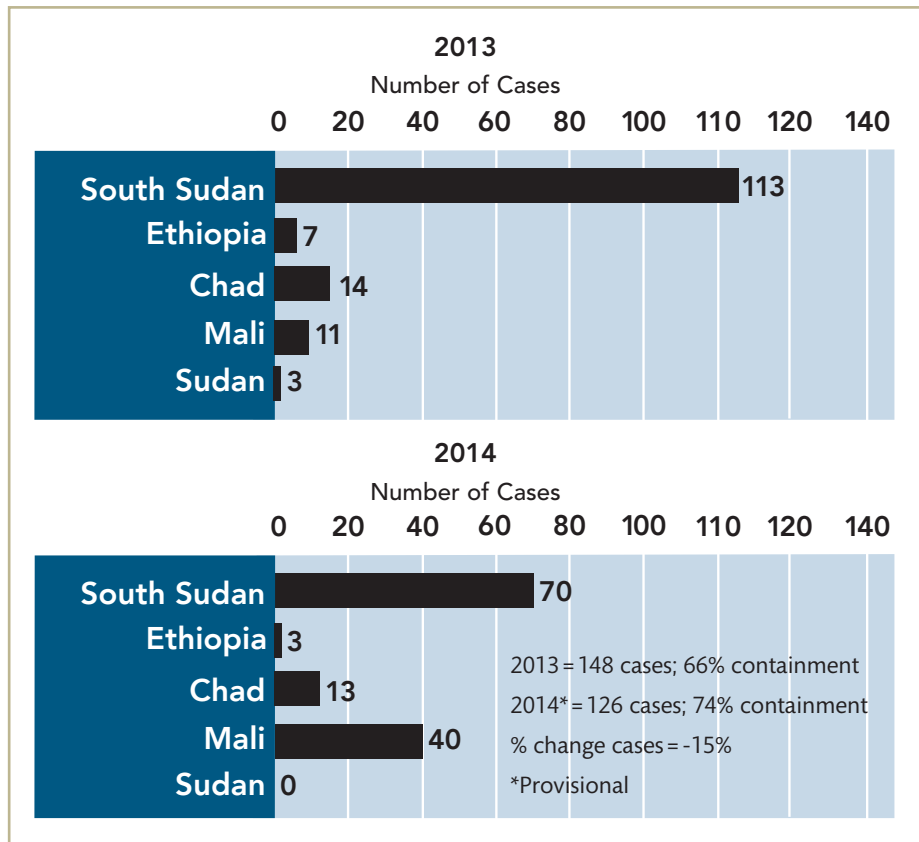


Figure 2: Distribution by Country of 274 Reported Cases of Dracunculiasis: January–December 2013 and 2014*

The Carter Center
One Copenhill
453 Freedom Parkway
Atlanta, GA 30307

THE
CARTER CENTER



This issue is made possible in part thanks to the Michael G. DeGroote Health Program Publications Fund.

For more information about The Carter Center and its health and peace programs, visit our website at www.cartercenter.org.



Ambassador (Ret.) Mary Ann Peters is the new chief executive officer of The Carter Center.

Carter Center Welcomes New CEO

Ambassador Mary Ann Peters has joined The Carter Center as its new chief executive officer.

She succeeds Dr. John Hardman, who held the post since 1992.

“Ambassador Peters’ commitment to world peace and human rights and her diplomatic expertise bring principled and experienced leadership to the Center’s critical mission to secure basic human rights worldwide,” former U.S. President Jimmy Carter said. “I also wish to thank Dr. John Hardman for his many years of effective and passionate service to The Carter Center, which has made a profound difference to our programs and ultimately to the lives of many millions of people.”

Ambassador Peters had been provost of the U.S. Naval War College since September 2008. Previously, she was dean of academics of the College of International and Security Studies at the George C. Marshall European Center for Security Studies in Garmisch-Partenkirchen, Germany. Prior to becoming dean of the college, Ambassador Peters served

as associate director for international liaison at the Marshall Center.

Ambassador Peters spent more than 30 years as a career diplomat with the U.S. Department of State. From 2000 to 2003, she was U.S. ambassador to Bangladesh, leading the mission’s efforts in support of the war on terrorism and other key U.S. foreign policy goals. She received a Presidential Meritorious Service Award in 2003 for her work there.

A senior diplomat, Ambassador Peters also has served in Sofia, Bulgaria, as deputy chief of mission; in Moscow as economic counselor; and in Mandalay, Burma, as principal officer. From 1988 to 1990, Ambassador Peters was the deputy director of the Office of Pakistan, Afghanistan, and Bangladesh Affairs in the State Department. She began her career as a vice consul in Frankfurt, Germany, in 1975.

Ambassador Peters holds a Bachelor of Arts degree from Santa Clara University and a Masters of International Studies from the Johns Hopkins School of Advanced International Studies and has taken courses at the Institut d’Etudes Politiques in Paris.