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THE CARTER CENTER



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### What's Inside

IACO: Guatemala Honored

Disease Gone from Abu Hamad

Advisory Committees Address River Blindness in Africa

President Carter Talks River Blindness

Ethiopia Fast-Tracks Surgeries Study Identifies Hygiene Practices

Girl, Family Benefit from Program

Abbott Strengthens Support

Nigerians Free from LF

11

Long-Term Partners in Health In Memoriam: Dr. Hailu Yeneneh

Guinea Worm Cases Fall

### Mexico Verified as Free of River Blindness

ship and strong partnerships, approximately 170,000 people in Mexico are no longer at risk of contracting river blindness. Dr. Mercedes Juan Lopez, Mexico's secretary of health, announced that the World Health Organization (WHO) had verified elimination of the disease on Sept. 29, 2015, in Washington, D.C., where she was attending a Pan American Health Organization meeting.

Mexico's success against onchocerciasis is the culmination of a more than 80-year national effort to first control, then eliminate, the debilitating disease. For this entire

period, the Mexican government maintained a cadre of field workers devoted exclusively to fighting the disease, demonstrating strong continues on page 3



A group of children parade through the village square during a health brigade visit in Chiapas, Mexico. The World Health Organization has verified that the country is free of onchocerciasis.

## South Sudan Neighbors Unite Against Trachoma

Partners from Ethiopia, Sudan, and **Uganda** joined the South Sudan Trachoma Control Program in April 2015 to support the first trachoma impact surveys conducted in the country. Training for the first survey was conducted in Eastern Equatoria state.

To conduct a trachoma impact survey, each team of surveyors needs a "grader" who is responsible for examining the eyelids of each person interviewed. All trained graders were ophthalmic clinical officers recruited

from eye hospitals throughout the country. Having never conducted an impact survey in the country, the South Sudan Trachoma Control Program requested that other trachoma programs in East Africa assist with the grader and survey training.

Neighboring countries Ethiopia, Sudan, and Uganda showed solidarity with South Sudan by sending seasoned personnel to conduct the training and certification process. Trainers Mulat Zerihun from the Carter Center Ethiopia, Dr. Husam Balla from the federal Ministry of Health in Sudan, and Dr.

Electronic Edition

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## Oscar de Lec

## Guatemala's Achievements Honored at IACO 2015

The 25th InterAmerican
Conference on Onchocerciasis
(IACO) recognized Guatemala's
success in the fight against river blindness and provided an opportunity to
share experiences from the Americas
with countries in Africa.

Held in Antigua, Guatemala, on Nov. 18–19, 2015, the meeting was opened by Mariano Rayo Muñoz, Guatemala's minister of public health and welfare under the theme "A century from discovery to elimination: Winning the fight against onchocerciasis in Guatemala and the Americas." The theme recognized the 100th anniversary of the discovery of river blindness in the Americas in 1915 by Guatemalan physician Dr. Rodolfo

Robles. Guatemala's postal service released a commemorative stamp, picturing Dr. Robles, to celebrate the elimination of onchocerciasis.

Guatemala has officially requested that the World Health Organization (WHO) send an international verification team in 2016 to confirm elimination. Colombia, Ecuador, and Mexico already have been

verified by WHO as having eliminated onchocerciasis. Brazil and Venezuela share the last active transmission zone



A stamp issued in Guatemala commemorates the 100th anniversary of Dr. Rodolfo Robles' discovery of river blindness in the Americas.

in the Americas, in a border area in the Amazon rainforest inhabited by the indigenous Yanomami people.

As the elimina-

tion effort in the Americas comes closer to completion, the Carter Center's Onchocerciasis Elimination Program for the Americas (OEPA) is sharing its successes and challenges with countries in Africa, home to 99 percent of the global river blindness disease burden. This year, attendance at IACO was expanded beyond the experts and partners from the Americas to include delegations from Ethiopia, Nigeria, and Uganda. As more African countries declare a policy of onchocerciasis elimination, IACO provides a fruitful and mutually beneficial opportunity to exchange information.

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



Dr. Edridah Tukahebwa, coordinator of neglected tropical diseases at Uganda's Ministry of Health, addresses the InterAmerican Conference on Onchocerciasis in November 2015 on the status of onchocerciasis elimination in Uganda.

## Sudan Declares River Blindness Gone from Abu Hamad Focus

At a review of Sudan's river blindness program held in October 2015, the isolated Abu Hamad focus was declared free of the disease. The focus halted transmission of the disease three years ago and has been under post-treatment surveillance.

At the national program review, supported by The Carter Center, the entomological and serological data collected in the Abu Hamad transmission zone after three years of post-treatment surveillance were examined. At the conclusion of the meeting, the state minister of health read a declaration that Abu Hamad had eliminated river blindness.

At the meeting, Dr. Frank
Richards, director of the Carter
Center's River Blindness Elimination
Program, noted with admiration that
Sudan has fully funded its national
river blindness programmatic activities
for the last three years, calling the
program an example for the rest of
Africa to emulate.



Participants in the Sudan river blindness program review include (from left): Dr. Balgesa Elkhair, National Blindness Control and Prevention; Hon. Victoria Sumaia Idris Akad, federal state minister of health; Dr. Nabil Aziz, Carter Center country representative for Sudan; Hon. Dr. Hassan Adburrahman, minister of health for River Nile state; Dr. Naeema Hasan Al-Gasseer, World Health Organization representative for Sudan; and Dr. Frank Richards, The Carter Center.

OED

In December 2006 the Republic of Sudan was the first African country

to declare a nationwide river blindness elimination policy.

#### Mexico

continued from page 1

leadership and sustained commitment. The long struggle and ultimate victory against this disease belong primarily to the people of Mexico and the Ministry of Health. The Carter Center's Onchocerciasis Elimination Program for the Americas (OEPA) and numerous other partners worked together to support this effort.

"Together with The Carter Center, Rosalynn and I recognize Mexico's dedicated river blindness health workers for improving the lives of so many for generations to come," said former U.S. President Jimmy Carter, co-founder of The Carter Center. "I am personally committed to wiping out this scourge in the Americas as soon as possible."

Mexico is one of six countries in the Americas that have been affected by onchocerciasis and is the most recent country in the world, after Colombia (2013) and Ecuador (2014), to apply for and be granted verification of elimination of onchocerciasis by WHO.

Each country receives a star on the OEPA logo when it has achieved this milestone.

Guatemala also has eliminated

transmission of the disease nationwide and filed its request for verification of elimination in March 2015. Transmission of the disease remains only in a small population of nomadic

Yanomami people in the

Amazon rainforest along the border between Brazil and Venezuela.

When one of the six initially endemic countries in the Americas is verified as free of river blindness, a corresponding star is placed at the top of the Onchocerciasis Elimination Program for the Americas logo. Mexico is the third

country to reach this goal.

## Expert Advisory Committees Address River Blindness in Africa

#### Uganda, Ethiopia, and Nigeria

have nationwide goals to interrupt river blindness transmission and halt ivermectin mass drug administration by 2020. For each country, meeting this challenge requires complex decisions, best made at the country level, about when to stop interventions, when to move to post-treatment surmultinational flavor, with membership that includes credible national and international onchocerciasis experts, as well as program leaders at national, regional, and district levels. The committees work under the directorates of national disease control in the ministries of health, but the chairpersons are not ministry personnel. This

or believed to be protected against river blindness in Uganda. During the last meeting, the committee determined that transmission had been interrupted in Nyamugasani transmission zone, or focus, and recommended that all interventions be stopped and the focus moved to post-treatment surveillance.

The committee recommended that four foci currently under post-treatment surveillance undergo serological and entomological assessments to ascertain evidence of recent transmission. If there is no evidence of transmission, the four foci will be moved to the category of "transmission eliminated."



The Ethiopia Onchocerciasis Elimination Expert Advisory Committee (EOEEAC) met in Addis Ababa for its second session, Oct. 6-8, 2015. The committee, currently chaired by Dr. Mark Eberhard, used the newly published Ministry of Health elimination guidelines that were generated during the first EOEEAC meeting to determine those areas where annual ivermectin doses had failed to interrupt transmission and to recommend a change in strategy to twice-a-year treatment. The committee also noted exciting serological data from children in Metema and West Armachio districts in Amhara that suggested transmission has been interrupted there; members recommended more entomological surveys for 2016 before recommending that treatment be stopped. The committee also discussed cross-border transmission and treatment of migratory workers and refugees.



Attendees at the August 2015 Uganda Onchocerciasis Elimination Expert Advisory Committee meeting include (from left): Dr. Edridah Muheki Tukahebwa, Ministry of Health, Uganda; Peace Habomugisha, The Carter Center, Uganda; and Tom Lakwo, Ministry of Health, Uganda.

veillance, and when to declare an area free from river blindness (also called onchocerciasis).

To support these countries, The Carter Center has provided technical and financial assistance to help establish national onchocerciasis expert advisory committees in Uganda (2008), Ethiopia (2014), and Nigeria (2015). They meet at least annually in their respective countries, and to the Carter Center's knowledge are the first of their kind in sub-Saharan Africa, where onchocerciasis is endemic.

The technical committees have both a national context and a

keeps the committees independent and uniquely technical. They form national guidelines based on World Health Organization guidelines for onchocerciasis elimination, supplemented by national considerations.

#### Uganda

The Uganda Onchocerciasis
Elimination Expert Advisory
Committee (UOEEAC) met in
Kampala for its eighth session, Aug.
3–5, 2015. Through its deliberations,
the UOEEAC, currently chaired by
Dr. Tom Unnasch, has determined
that 2.7 million people are now known



specifies what information is needed for the committee to recommend stopping treatment in up to seven Nigerian states. The committee also is prepared to support the move to twice-per-year treatment where there is evidence of ongoing transmission after years of annual ivermectin treatment. The NOEC will meet once or twice per year, depending on progess and need. Sir Emeka Offor, the Carter Center's special emissary for river blindness in Nigeria, attended the meeting and was warmly welcomed.

Attendees at the October 2015
Ethiopia Onchocerciasis Elimination
Expert Advisory Committee meeting
include (from left): Dr. Adrian Hopkins,
Task Force for Global Health; Dr.
Frank Richards, The Carter Center;
Dr. Tom Unnasch, University of South
Florida; Hon. Kebede Worku, Ministry
of Health; Dr. Amha Kebede, EPHI;
Aderajaw Mohamed, The Carter
Center, Ethiopia; Biruck Kebede,
Ministry of Health.

#### Nigeria

The Nigeria Onchocerciasis Elimination Committee (NOEC) had its second meeting in Abuja, Aug. 8–14, 2015. The committee, currently chaired by professor B.E.B. Nwoke, has developed a roadmap that



Attendees at the August 2015 Nigeria Onchocerciasis Elimination Committee meeting include (from front row, third from left): professor B.E.B. Nwoke, committee chair, Imo State University; Dr. Idi Hong, former minister of state, Ministry of Health; Dr. Vita Cama, Centers for Disease Control and Prevention; Dr. Emmanuel Miri, The Carter Center, Nigeria; Sir Emeka Offor, the Carter Center's special emissary for river blindness in Nigeria; Dr. Bridget Okoeguale, Nigeria Ministry of Health; Dr. Frank Richards, The Carter Center; and many others.

## President Carter Talks River Blindness with Venezuela's President

#### Former U.S. President Jimmy

Carter met with Venezuelan President Nicolás Maduro Moros in New York on Sept. 28, 2015, to discuss the status of the campaign to eliminate river blindness (also known as onchocerciasis) from the Americas. Transmission of the parasite that causes the disease continues only in the cross-border region between Venezuela and Brazil. The two leaders discussed how to implement a 2014 Venezuela-Brazil agreement to use cross-border teams

to deliver health education and Mectizan,® donated by Merck, to the approximately 27,000 indigenous Yanomami people at risk for the disease along the shared border.

In 2014 the ministries of health of Brazil and Venezuela signed a binational agreement specifically to enhance the coordination of their efforts to complete the job of onchocerciasis elimination in the Americas. The agreement reflects the political will in those two countries

to undertake the challenging task of delivering integrated health care along with ivermectin mass drug administration in this remote area.

President Carter expressed to
President Maduro his hope that much
more rapid progress could be made,
and President Maduro promised
his personal support for the effort.
President Carter also has reached out
to Brazilian President Dilma Rousseff
for her help in the campaign.

#### South Sudan

continued from page 1

John Binta, a retired ophthalmologist from the Ministry of Health in Uganda, have extensive experience assisting their respective national ministries of health with trachoma-related baseline and impact surveys. Such a diverse and experienced group of trainers enhanced the quality of training offered to the South Sudanese and provided an opportunity for cross-border learning, not only for the trainees but also the trainers, who were visiting South Sudan for the first time.

Makoy Samuel Yibi, director of the South Sudan Guinea Worm Eradication Program, told the trainees, "You are pioneers in this field—a resource that will be called upon for

years to come as we continue to conduct impact surveys."

Thanks to the assistance provided by neighboring countries, South Sudan has graduated its first group of trachoma graders, and they have gone on to conduct surveys in five counties. The surveys from Budi and Lafon counties were completed in May 2015 and show that the implementation of the full SAFE strategy is still needed, including at least three more rounds of mass drug administration. Three other counties—Kapoeta North, Kapoeta South, Kapoeta East—were completed in October 2015, and analysis of the data is underway. 🖪



Mulat Zerihun, from The Carter Center of Ethiopia, assists with grader training in South Sudan. Experienced trainers came from Ethiopia, Sudan, and Uganda.



In preparation for South Sudan's first trachoma impact surveys, training was held in Eastern Equatoria state in May 2015. Pictured participants include Carter Center staff, trachoma grader trainers, and their trainees.

## Ethiopia Fast-Tracks Trichiasis Surgeries to Alleviate Backlog

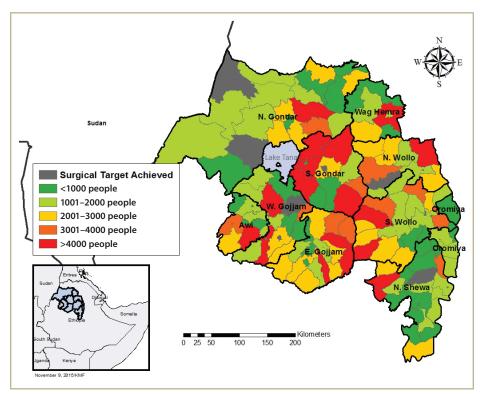
In 2014, the federal Ministry of Health in Ethiopia introduced the Fast Track Initiative to clear the national backlog of trachomatous trichiasis (TT) cases in 18 months. After considerable planning, the ministry launched a pilot in four regions, including the Amhara region where The Carter

Center assists, to assess the impact of new strategies to tackle the TT backlog. In April 2015, the pilot was initiated in all 20 woredas, or districts, of the East Gojjam zone of the Amhara region. East Gojjam zone harbors over 46,000 people living with TT, about 14 percent of the total regional backlog

of about 326,000 people.

To scale up TT surgical services, the zonal and woreda health offices created trachoma task forces to review progress and make recommendations. Critical to the success of the pilot was the decision that integrated eve-care workers, who are trained to conduct TT surgery, operate full time rather than splitting time between duties as a general health worker and an eye-care worker. Through this change, newly trained eye-care workers in the East Gojjam zone operated on an average of 77 people per month (based on available data from April-June 2015), and over 17,000 people in the zone received surgery between April and August 2015, about 38 percent of the total number of surgeries conducted in the region in 2015.

Based on the success of the Fast Track Initiative pilot, this model is being scaled up to the remaining nine zones in the region to accelerate progress toward clearing the TT backlog in 18 months and move closer to reaching the goal of eliminating blinding trachoma as a public health problem by 2020.



This district-level map of Ethiopia's Amhara region shows the surgical backlog.

## Ethiopia Study Identifies Hygiene, Sanitation Practices

In February 2015 The Carter Center launched a study in the Amhara region of Ethiopia to evaluate opportunities to better address the facial cleanliness and environmental improvement aspects of the SAFE strategy. The Amhara region has the highest known prevalence of trachoma in the world. The goal of the study is to provide insight and understanding about the barriers and challenges people in the region face with latrine use and facial cleanliness.

Households in all 10 zones of the region were surveyed and focus groups were conducted with teachers, students, community leaders, women's health group leaders, and health workers. Results show that while the act of washing is reported as part of daily routines in households, many people said they do not always wash their face daily due to too much work and fatigue at the end of the day.

Data analysis also uncovered stigma for being "too clean," especially

for women—an idea described most often among women's group members as suggesting that overly clean women were not performing their household and possibly marital duties as they should. Additional barriers to face washing include aspects of infrastructure such as availability of soap and water.

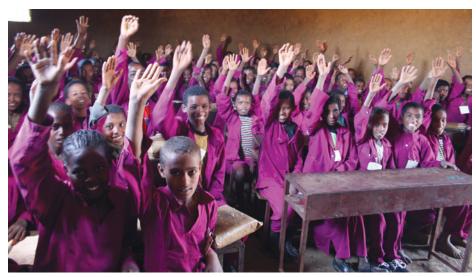
The preliminary analysis also presented some positive data. Every group in the study mentioned the

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continued from page 7

health benefits of using latrines and washing regularly.

Findings from the study are contributing to the revision of education materials to supplement the official regional curriculum for primary schools. Early results were presented at a workshop for education officials, teachers, principals, and health care workers in July 2015. Of the revisions, the addition of engaging visual aids to the lessons is something the study highlights as a universal want and need across the region.



Students in the Amhara region of Ethiopia will soon have a revised health education curriculum that promotes good hygiene and sanitation practices.

## Girl, Family Reap Ongoing Benefits from Trachoma Program

In 2005, former U.S. President Jimmy Carter and former First Lady Rosalynn Carter, co-founders of The Carter Center, met 3-year-old Haymanot Shibabow and her family in the village of Mosebo in the Amhara region of Ethiopia during a visit to celebrate the launch of the trachoma program to the entire region. Haymanot's family, early adopters of household latrines, proudly

showed President and Mrs. Carter the household latrine and Haymanot's training latrine.

Today, Haymanot's family is using their third household latrine, and Haymanot's youngest sister, Kalkidan, has her own training latrine, just as Haymanot did when she was younger. In addition to constructing and using latrines, Haymanot and her family

have taken antibiotics for several years as part of annual mass drug administration campaigns for trachoma, and know the benefits of face washing. Haymanot and her family credit increased awareness and behavior change, such as adoption of household latrines, for the significant improvements to community health that they have observed over several years.



Haymanot Shibabow, 3, shows her training latrine in September 2005.



Five years later, Haymanot, 8, uses her own latrine in November 2010.



Last year, in August 2015, Kalkidan (left) and Haymanot Shibabow, ages 6 and 13, respectively, show the training latrine used by Kalkidan in their family's household compound.

The Carter Center

## Abbott Strengthens Support of Ocular Specimen Processing

Through a partnership with The Carter Center, Abbott will contribute laboratory reagents and consumables over the next four years to augment the use of equipment donated in 2013. These materials will be critical in assisting the Trachoma Control Program with tracking its effectiveness and progress through future impact surveys and planned operational studies.

Abbott's previous donations to The Carter Center bolstered the laboratory capabilities and research capacity of the Amhara trachoma program, allowing for sensitive impact surveys requiring polymerized chain reaction laboratory diagnosis.

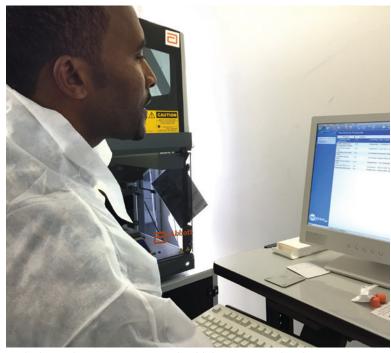
This contribution will enable the Trachoma Control Program to generate the world's largest body of infection data on trachoma, which, with analysis, should lead to improved protocols and operational techniques. Additionally, this new capacity will help the program better

#### Meet Ambahun Chernet

Ambahun Chernet is the senior medical laboratory technologist in the *Chlamydia trachomatis* polymerized chain reaction (PCR) laboratory at the Bahir Dar Regional Health Research Laboratory Center in Ethiopia. He has been with the laboratory since 2007 and joined The Carter Center in 2014. Working with Abbott-donated equipment and reagents, Ambahun has already processed nearly 48,000 ocular swab samples collected from children throughout the Amhara region as part of trachoma program activities. Ambahun has years of experience conducting PCR assays, including work on various HIV projects. Ambahun grew up in rural Amhara and remembers family members who were



afflicted with trachoma. He became interested in laboratory science while attending university. He enjoys working on a gold-standard PCR machine and enjoys collaborating with regional, national, and international partners to solve problems and complete trachoma-related projects.



Ambahun Chernet, senior medical laboratory technologist, operates the Abbott-donated polymerized chain reaction machine at the Bahir Dar Regional Health Research Laboratory Center in Ethiopia.

understand the relationship between clinical presentation and infection in Amhara. The results of these analyses not only have the potential to transform how the Carter Center's trachoma program considers these relationships in hyperendemic areas, but could lead to changes in treatment guidelines worldwide.

These materials will be critical in assisting the Trachoma Control Program with tracking its effectiveness and progress through future impact surveys and planned operational studies.

The Carter Center has been working with the Amhara Regional Health Bureau in the Amhara region of Ethiopia since 2000 to operate a comprehensive trachoma program. The Amhara region has the highest known prevalence of trachoma in the world, requiring intensive and innovative interventions to reduce transmission and decrease prevalence to meet World Health Organization targets by 2020.

## The Carter Cer

## In Nigeria, 6.9 Million People Free from Lymphatic Filariasis

**Recent surveys confirm** that lymphatic filariasis (LF) transmission has been interrupted across Plateau and Nasarawa states in central Nigeria.

Recent surveys confirm that LF transmission has been interrupted across Plateau and Nasarawa states in central Nigeria.

Also known as elephantiasis, LF is a mosquito-transmitted parasitic disease in which adult filarial worms reside in the lymphatic vessels causing blockage and dysfunction that can lead to grotesque swelling of the legs (lymphedema) and male genitalia (hydrocele).

Around 60 percent of Nigeria's 174 million inhabitants are at risk of LF—the largest at-risk population in sub-Saharan Africa and the third largest globally (after India and Indonesia). The federal and state ministries of health, with assistance from The Carter Center, launched an LF elimination program in Plateau and Nasarawa states in the late 1990s as an extension of the existing Carter Center-assisted river blindness elimination effort. The goal of the LF elimination program—the first of its kind in Nigeria—was to demonstrate that annual mass drug administration of ivermectin and albendazole (provided by Merck and GSK, respectively), together with insecticide-treated bed nets, could interrupt transmission of LF. After

the program expanded in 2003 to all 30 local government areas in Plateau and Nasarawa—a population of 6.9 million people—mean LF antigen rates dropped from 23 percent at baseline to less than 2 percent in 2012—thereby meeting the criteria for stopping mass drug administration.

Around 60 percent of Nigeria's 174 million inhabitants are at risk of LF—the largest at-risk population in sub-Saharan Africa.

World Health Organization guidelines recommend that a transmission assessment survey be conducted two to three years after the last round of

> drug administration to verify the absence of LF transmission. The survey is designed to provide an easily understandable outcome ("pass" or "fail") with robust statistical underpinnings linked to LF transmission thresholds. In June to July 2015, a total of 10,547 children 6 to 7 years old were tested for the presence of LF antigen in 26 of the 30 local government areas in Plateau and Nasarawa. (The other four areas successfully passed the assessment survey in 2014.) Of those tested, only 3 children (0.03 percent) were positive for LF antigen, meaning all areas passed the transmission assessment survey and LF transmission remains interrupted across Nigeria's Plateau and Nasarawa states. E



Transmission of lymphatic filariasis in Nigeria's Plateau and Nasarawa states has been interrupted, and children there no longer need to fear the disfiguring parasitic disease.

## Long-Term Partnerships Yield Better Health in Africa, Americas

For almost 20 years, in-kind partnerships between pharmaceutical companies and The Carter Center have allowed millions of people to live healthier lives.

Merck On Sept. 29, 2015, Merck



and the Mectizan® Donation Program honored President Carter and the Center's Onchocerciasis Elimination Program for the Americas (OEPA) for the achievements in interrupting transmission of onchocerciasis. Also honored were the ministries of health of the six endemic countries in the Americas and the Pan American Health Organization. The event took place in Washington, D.C., during the

Pan American Health Organization's 54th Directing Council meeting. This regional global health success could not have been achieved without the nearly 20-year public-private partnership between Merck and the Carter Center's OEPA. Merck's Mectizan Donation Program represents a global gold standard in corporate responsibility and since 1996 has generously donated the over 200 million Mectizan treatments that The Carter Center has helped distribute in over 30,000 endemic communities in 11 countries in the Americas and Africa. The Carter Center sincerely thanks its partners at Merck and the Mectizan Donation Program and is grateful for the opportunity to celebrate this success together.

Pfizer Inc On Nov. 16, 2015, the International Trachoma Initiative and International Coalition for Trachoma Control partners celebrated the donation of the 500 millionth dose of Zithromax® by Pfizer Inc. The celebration, which took place in Ethiopia, showcased the great progress toward elimination of blinding trachoma and the program's expansion. Pfizer's donation of Zithromax has allowed the Carter Center's Trachoma Control Program to make ambitious progress in delivering the antibiotic component of the SAFE strategy endorsed by the World Health Organization. Since 1999, The Carter

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## In Memoriam Dr. Hailu Yeneneh (1947–2015)

**Dr. Hailu Yeneneh**, 68, passed away in Addis Ababa, Ethiopia, in November 2015. Dr. Hailu was resident technical adviser for the Carter Center's Ethiopia Public Health Training Initiative from February 2004 through December 2010.

Born in central Ethiopia in 1947, Dr. Hailu graduated as a health officer from the former Gondar Public Health College in 1970. After 11 years of service in rural health centers and regional health departments, he earned his medical doctorate from Addis Ababa University and a Master of Science in epidemiology and biostatistics from McGill University in Canada. Prior to joining The Carter Center in 2004, Dr. Hailu taught and conducted research at Addis Ababa University, directed the National

Research Institute of Health, and consulted for various governmental and private organizations focusing on public health problems of importance in Ethiopia.

As resident technical adviser for the Carter Center's Ethiopia Public Health Training Initiative (EPHTI), Dr. Hailu facilitated capacity building of health science faculties in seven partnering universities in Ethiopia: Addis Ababa, Alemaya, Defense, Hawassa, Jimma, and Mekele universities, and the University of Gondar. The initiative's activities included facilitating the development of teaching materials by health science instructors, training instructors in pedagogical and writing skills, and equipping teaching facilities to ensure students acquired practical skills. In late 2010, as part of the original agreement between the Ethiopian government and The Carter Center, the Carter Center-assisted EPHTI



Dr. Hailu Yeneneh

was officially transferred to Ethiopia's federal ministries of Health and Education, where Dr. Hailu continued to lead the project.

Dr. Hailu's wife is Abaynesh Tadesse Legesse, and his children are Bethlehem Hailu Yeneneh and Henok Hailu Yeneneh. The Carter Center One Copenhill 453 Freedom Parkway Atlanta, GA 30307

### THE CARTER CENTER



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

#### Long-Term Partnerships

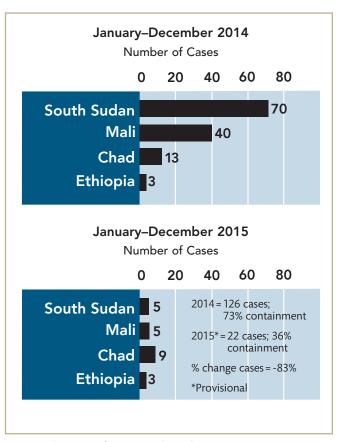
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Center has assisted in distributing over 130 million doses of Pfizer-donated Zithromax, representing over 25 percent of Pfizer's global donation. Pfizer leaders and employees should be extremely proud of these vital contributions that have supported the goal to eliminate blinding trachoma worldwide by 2020. The Carter Center congratulates Pfizer Inc on this important milestone and thanks them for their longstanding commitment.

#### **GSK**

Since 1998, GSK has been a key partner for the Carter Center's Lymphatic Filariasis (LF) Elimination Program in both Nigeria and Ethiopia. LF, also known as elephantiasis, is a mosquitotransmitted parasitic disease that can cause extreme deformities, male hydrocele, fevers, and painful secondary infections. Since the late 1990s GSK has donated albendazole, an anthelmintic medicine, to support the fight against LF. The Center's LF Elimination Program provides this medicine with Mectizan in community-level mass drug administration. Thanks to GSK's generosity, to date The Carter Center has assisted in the delivery of over 62 million treatments for LF. The Carter Center appreciates GSK's ongoing partnership and looks forward to celebrating the elimination of LF in Carter Center-assisted areas of Nigeria and Ethiopia. E

## Guinea Worm Disease Update



Reported Cases of Dracunculiasis by Country January–December 2014 and 2015\*