



# Eye of the Eagle



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THE CARTER CENTER

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## Progress Against Onchocerciasis Celebrated

**U**nder the theme of “25 Years of Mectizan® Donation: Achieving the Impossible Dream,” attendees of the 22nd annual Inter-American Conference on Onchocerciasis marked new milestones in the effort to eliminate the disease from six endemic countries in the Americas.

Convened in the city of Tuxtla Gutiérrez, Chiapas state, Mexico, Oct. 24–26, 2012, the conference drew more than 90 people—ministry of health officials, front-line health

workers, and international partners.

The meeting was held in Chiapas on the heels of its 2011 interruption of onchocerciasis transmission. The South Chiapas focus, the last and largest of Mexico’s three endemic foci, is now undergoing three years of post-treatment surveillance to prove that the country has eliminated the disease for good. The South Chiapas focus was once one of the most severe areas for onchocerciasis in the Americas.

Ecuador reported that after three years of post-treatment surveillance,

epidemiological evaluations for 2012 were negative for recrudescence of disease transmission, demonstrating that onchocerciasis has been eliminated from the country. The Program Coordinating Committee of the Carter Center–assisted Onchocerciasis Elimination Program for the Americas (OEPA) issued a recommendation to the Ecuador Ministry of Health that it formally request verification of onchocerciasis elimination from the Pan-American Health Organization

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*Waging Peace. Fighting Disease. Building Hope.*

## Nigerien Trichiasis Patients Describe Quality of Life

**I**t’s like thorns pricking my eyes.”  
“I spend a lot of time sitting and crying.”

“I have never felt pain like this... it’s like it [my eye] was put on fire.”



Stephanie Palmer

The pain of trichiasis was described in these ways by Nigerien women interviewed for Niger’s national trachoma program last August. The in-depth

*In the Zinder region of Niger, a trichiasis patient, supported by a friend, describes her experience with the disease.*

*continues on page 7*

# River Blindness

## IACO 2012

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and the World Health Organization. If the ministry approves, Ecuador, with assistance from OEPA, will compile the detailed documentation required to initiate certification, becoming the second country to make such a request; Colombia did so in 2011, and its verification process is ongoing.

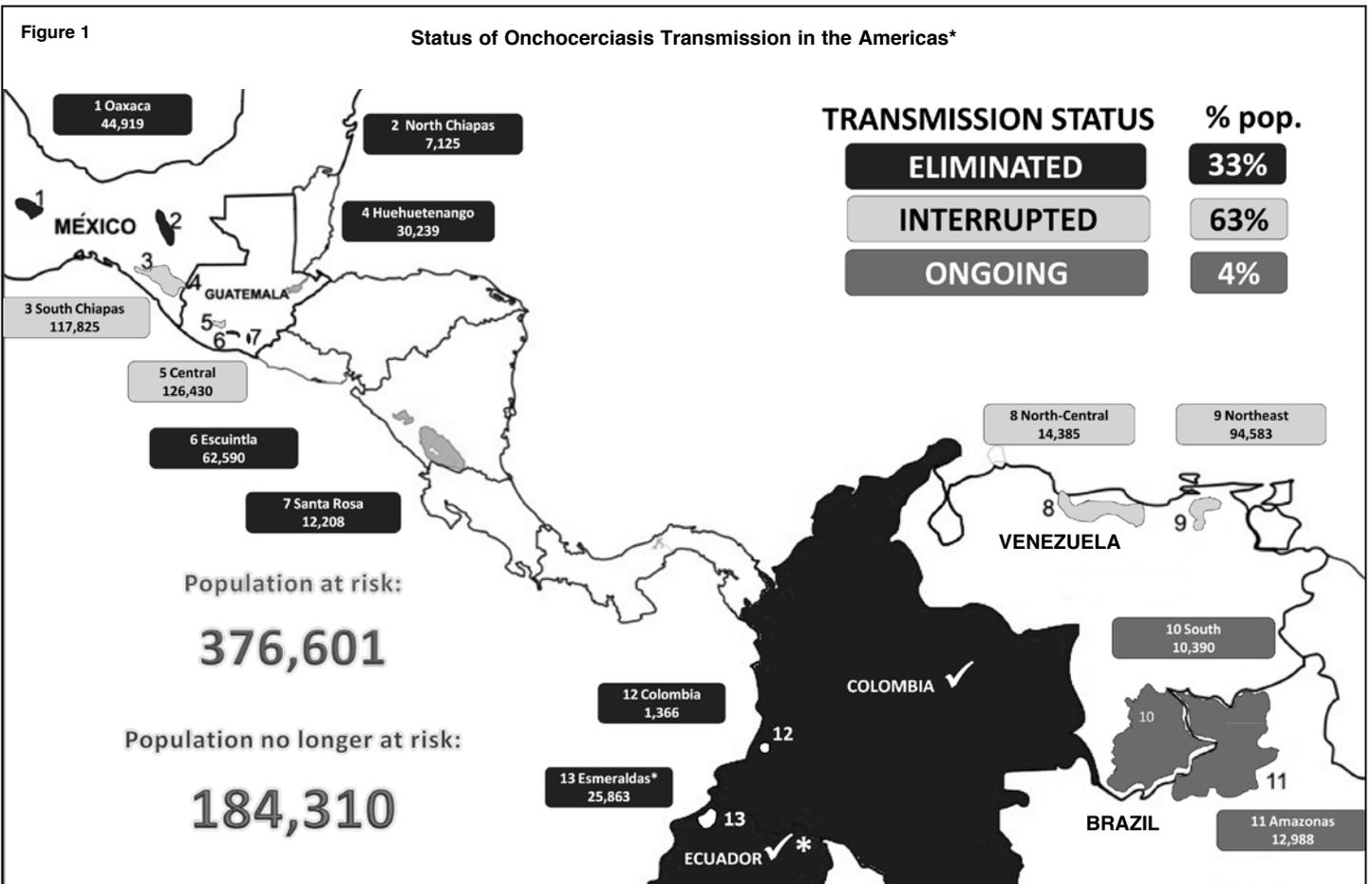
In addition, the Program Coordinating Committee recommended that the Northeast focus of Venezuela be reclassified from “transmission suppressed” to “transmission interrupted” status, now that the focus has met the necessary

epidemiological criteria to make this transition. Approved by the Venezuela Ministry of Health in December 2012, this shift will halt approximately 218,000 treatments in 2013; they will no longer be needed.

This status change also means that only two foci in the Americas have yet to break the cycle of transmission: the adjacent Amazonas (Brazil) and South (Venezuela) foci, which comprise the Yanomami area of the Amazonian rainforest. The Yanomami area has long been recognized as the location where onchocerciasis will make its last stand in the Americas. Conference attendees spent significant time discussing the challenges of halting transmission



in this difficult area, including the nomadic lifestyle of the people and the remote, difficult terrain that often can



Boxes show name of focus and original population at risk.  
\* Pending acceptance of the governmental authorities of Ecuador.  
✓ Country has satisfied the criteria to apply for verification of elimination.

# River Blindness



*Lion Dr. Florencio Cabrera addresses IACO attendees.*

only be accessed by helicopter. In addition, illegal mining groups are known to encroach in the region, causing land travel to be dangerous, rather than only extremely arduous.

Figure 1 shows the transmission status and location of the 13 foci in the Americas. Pending Ecuador's approval, seven foci have stopped treatment and successfully passed through three years of post-treatment surveillance to reach the status of eliminating disease transmission. After Venezuela's approval of stopping treatment in the Northeast focus, four foci are conducting post-treatment surveillance.

In 2012, four-times-per-year treatment was the aim in 288 of the 672 communities still receiving treatment. Provisional reports through October 2012 showed 52,126 treatments were provided in those communities, and 64,488 treatments were provided in twice-per-year communities, for a total of 116,614 treatments. Only 4 percent of the original population at risk will still receive treatment in 2013—fewer than 24,000 people. Four-times-per-year treatment will be used as part of

the effort to accelerate disease elimination, especially in hyperendemic and mesoendemic Yanomami communities.

Headquartered in Guatemala, the Carter Center's OEPA is the technical and coordinating body of a multinational, multiagency coalition in cooperation with the six affected countries. OEPA was created in 1993



*Chiapas state Governor Juan Sabines Guerrero stands with Mexican "brigadiers," celebrating the efforts of the health workers who have been instrumental in ridding Mexico of onchocerciasis.*

Lindsay Rakers

in response to the Pan American Health Organization's call to accelerate the fight against onchocerciasis in the 13 endemic foci in the Americas. The affected foci use health education and mass drug administration of Mectizan,<sup>®</sup> donated by Merck, twice or four times per year, with the goal of eliminating the disease from Latin America.

IACO '12 was convened by the Ministry of Health of Mexico, The Carter Center, and the Pan American Health Organization, with partnership and support from the U.S. Centers for Disease Control and Prevention, U.S. Agency for International Development, Bill & Melinda Gates Foundation, Lions Clubs International Foundation, Alwaleed Bin Talal Foundation, and the OPEC Fund for International Development. Of the 90 attendees, including representatives of the endemic countries and Chiapas ministries of health, about 30 were Chiapas "brigadiers." These are the true foot soldiers in the army against

*continues on page 4*

# River Blindness

## Sauerbrey Accepts 2012 Mectizan Award

**D**r. Mauricio Sauerbrey, director of the Onchocerciasis Elimination Program for the Americas (OEPA), received the Mectizan® Award in London on World Sight Day, Oct. 11, 2012. The award was given at an event celebrating the 25th anniversary of the Mectizan Donation Program. Dr. Sauerbrey was cited for his strong advocacy, leadership, and diplomacy for onchocerciasis elimination in the Americas.

In his acceptance speech, Dr. Sauerbrey deferred credit to the hard work of those involved with the onchocerciasis elimination: his team at OEPA, the governments of the six onchocerciasis-endemic countries in the Americas, and, most crucially, the health workers who ensure that the drug gets into the mouths of those who need it.

Dr. Sauerbrey has directed OEPA since 1998, witnessing many program achievements, including the interruption of disease transmission in four of the six endemic countries. Before coming to The Carter Center, he worked extensively on public health control programs in El Salvador, leading the successful malaria control program



Lindsay Rakers

*Flanked by representatives of national onchocerciasis programs, Dr. Mauricio Sauerbrey holds the Mectizan Award. From left: Dr. Marisela Escalona, program coordinator, South focus, Venezuela; Zoraida Morales, director, Guatemala program; Dr. Harland Schuler, national coordinator, Venezuela program; Raquel Lovato, director, Ecuador program; Dr. Mauricio Sauerbrey, director, Onchocerciasis Elimination Program for the Americas; Dr. Sofía Duque, director, Colombia program; Dr. Gustavo Sánchez Tejada, subdirector, Vector Borne Diseases Unit, National Center for Preventive Programs and Disease Control, Mexico; Dr. Joao Batista Furtado Vieira, director, Brazil program.*

there with United States Agency for International Development assistance. His legacy endures today as El Salvador is one of the first countries in Central America under consideration for malaria elimination. Dr. Sauerbrey has been a member of the Expert

Advisory Panel on Malaria and the Steering Committee on Epidemiology and Vector Biology and Control of Chagas Disease at the World Health Organization and the Special Program for Research and Training in Tropical Disease.

### IACO 2012

*continued from page 3*

onchocerciasis—the local health workers who tirelessly travel to the remote reaches of the state, providing treatment, surveillance, and health education. It was noted that they often sleep not in “four- or five-star hotels,” but under open skies in “million-star

hotels.” The governor of Chiapas, Juan Sabines Guerra, addressed the conference during the opening ceremony, sharing details on the fight against onchocerciasis over the years in his state and congratulating the countries and partners on their accomplishments.

Longtime partners the Lions Clubs were represented at the conference by Dr. Florencio Cabrera, SightFirst representative of the Lions Clubs of

Mexico, and his guest, Muñoa Pola, district governor for the Chiapas Lions Clubs. Lions have long supported onchocerciasis work in the Americas, both through the Lions Clubs International Foundation and through local clubs.

The conference concluded with a pledge by all participants to continue to work to make onchocerciasis history in the Americas.

## Committee Recommends Treatments Halt in Three Foci in Uganda in 2013

At its August 2012 meeting, an advisory committee made three recommendations to the Uganda Ministry of Health to advance onchocerciasis elimination in the country. If the recommendations are accepted, then some Ugandans would no longer need to receive treatment with mass drug administration for onchocerciasis in 2013, while other Ugandans would begin receiving treatment for the first time.

Part of the Uganda Onchocerciasis Elimination Program, which is defining a systematic, science-based approach to transmission interruption activities in Africa, the Uganda Onchocerciasis Elimination Expert Advisory Committee (UOEEAC) advises the Uganda Ministry of Health and its National Certification Committee. The committee's major responsibility is to evaluate the current status of 14 of the original 18 transmission zones (foci) of onchocerciasis in Uganda in light of the national elimination guidelines and laboratory-based molecular testing, and to recommend programmatic action.

The UOEEAC had its fifth annual meeting in Kampala on Aug. 7–9, 2012, under the chairmanship of Dr. Thomas Unnasch, University of South Florida. The committee made three key recommendations:

First, the UOEEAC recommended that Mectizan mass drug administration be halted in Imaramagambo and Mpamba-Nkusi foci, where epidemiological data indicate that transmission of onchocerciasis has been broken. The two foci should enter a three-year

post-treatment surveillance phase. Data for Maracha-Terego focus also indicate transmission interruption, but treatment will continue due to lymphatic filariasis endemicity. The committee noted that if the National Certification Committee were to accept these recommendations, mass drug administration would be halted for an additional 331,954 people in 2013.

Second, the UOEEAC noted that at its next meeting, the group could consider halting treatment in Kashoya-Kitomi and Wambabya-Rwamarongo foci in 2014, if additional evidence is gathered in the upcoming year to support currently available data. The affected population in these three foci is 285,070.

The UOEEAC considers *S. damnosum* s.s. to be the likely vector in northern Uganda, where highly active onchocerciasis transmission persists. For its third recommendation, the committee urged that entomological studies be undertaken immediately to confirm this. If confirmed, the wide flight range of *S. damnosum* s.s. means that the two foci in the North (Mid North 1 and Mid North 2) are not discrete but form a

single ecological transmission zone that possibly extends into South Sudan. The proposed composite North focus would be the largest in Uganda. The committee urged that the Ministry of Health immediately implement semiannual treatment with ivermectin throughout the combined focus area. This recommendation has major implications given that the combined treatment population target of about 780,500 would require—under a twice-per-year program—the delivery of more than 1.56 million treatments per year.

At its 2011 meeting, UOEEAC approved the status of interruption of transmission for three foci—Mount Elgon, Itwara, and Wadalai.



Kay Hinton

*Technician Monica Ngabirano tests blood samples at the Carter Center–assisted Ministry of Health lab in Kampala, Uganda. Analyzing thousands of samples each year, the lab looks for evidence of onchocerciasis to determine whether there is active transmission of the disease in a focus. In 2012, an advisory committee recommended that two foci in Uganda no longer receive treatment, meaning that the lab found no evidence of transmission there.*

# River Blindness

## BASF Donates Larvicide for River Blindness

For more than 22 years, BASF and previous product manufacturers American Home Products and American Cyanamid have donated Abate® larvicide to the Carter Center's Guinea Worm Eradication Program. In 2012, BASF expanded that pledge to include the River Blindness Program in Uganda.

**BASF has promised to provide 4,670 liters of Abate in annual allotments.**

A long-term partnership that will extend through 2020, BASF has promised to provide 4,670 liters of Abate in annual allotments. By that time, Uganda is hoping it will have eliminated river blindness from within its borders. The new donation to the River Blindness Program is valued at \$93,400, bringing the total in-kind value of all Abate donated to the Center to more than \$4.1 million since 1990.

Temephos, the active ingredient in Abate, is an organophosphorus insecticide that is used mainly as a larvicide to control mosquitoes, midges, black flies, and other insects for public health. It has been recommended under the World Health Organization Pesticides Evaluation Scheme and is specified in its *Guidelines for Drinking*

*Water Quality* (4th edition, 2011) for use as a vector-control agent in drinking water sources at concentrations not exceeding 1 milligram per liter.

BASF, the world's largest chemical company, is headquartered in Germany and employs approximately 111,000 people throughout the world. The business was founded in 1865 by Friedrich Engelhorn, the owner of a coal gas company in Mannheim, originally for the production of dyes. The company's portfolio now ranges from chemicals, plastics, performance products, and crop protection products to oil and gas. In addition to Abate larvicide, BASF offers a range of products to protect homes, health,



Kay Hinton

*A donation of the larvicide Abate by BASF will help control the black fly population in Uganda. The fly larvae and pupae shown here were pulled from underwater vegetation in Pader district.*

food, and water from pests. These include malaria prevention tools such as long-lasting insecticide-treated bed nets and chemicals used for indoor residual spraying of walls.

### In Memoriam Nancy Cruz Ortiz

The Carter Center and its Onchocerciasis Elimination Program for the Americas (OEPA) team mourn the untimely loss of Nancy Cruz Ortiz, our highly esteemed friend and colleague. She passed away Aug. 3, 2012.

Cruz Ortiz supervised the critical work of the Universidad del Valle onchocerciasis elimination reference laboratory in Guatemala City, assisting in epidemiological evaluations of OEPA since 2005. Her work contributed to the transition of seven of the 13 foci in the Americas from "transmission ongoing" to "transmission eliminated." Cruz Ortiz put her heart into her work and was not satisfied by anything less than excellence. She

had a keen eye for precision in her results, a staunch dedication to the vision of elimination, and a positive spirit that motivated those around her.

Onchocerciasis was just one of Nancy's public health concentrations, which also included Chagas disease, soil-transmitted helminths, and leishmaniasis. She will be missed and fondly remembered.



Lindsay Rakers

Nancy Cruz Ortiz

**BASF**  
The Chemical Company

# Trachoma

## Nigerien Patients

*continued from page 1*

discussions, supported by The Carter Center, were conducted with 23 women with trichiasis and a female friend of their choosing in the Zinder and Maradi regions to determine the effects of trichiasis on women's quality of life. Some of the women had received surgery for trichiasis and some had not. Interviewers' questions included how the women defined quality of life, how trichiasis had affected their lives, what perceptions they had about trichiasis surgery, and how they made decisions about surgery.

Many women reported being unable to perform their daily chores and activities, feeling as though they were a burden to other family members and the object of social stigma and

isolation. Several described being mocked and called "one-eyed." One young woman described a potential suitor who visited her father to request her hand in marriage but never returned once he learned of her condition. One woman said, "It inhibits me from following my friends for activities in the village.... If you don't have eyes, it's like a living death."

Trichiasis also creates financial difficulties for victims and their families. Some women described spending money to look for a cure. For others, the condition led to the loss of opportunities to earn income and become financially independent.

Nearly all women who had received surgery reported an improvement in their quality of life: their pain and other symptoms had decreased or

disappeared, and they were able resume their work and social activities.

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**"If you don't have eyes,  
it's like a living death."**

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Interviewers asked the women who had not received surgery to explain why; some of those with mild cases doubted they had trichiasis at all. Several women said that their names had not yet made the surgical list (reflecting a belief that the program chooses which patients receive surgery during a campaign), that a surgeon had told them that their trichiasis was not yet "ripe" for surgery, or that they did not hear about previous surgical campaigns until too late. However, nearly all expressed a desire to receive surgery in the future.

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## Innovative Strategies Connect Patients, Surgeons

New approaches in South Sudan increased the number of trichiasis surgeries from July through September 2012, compared with the same period in 2011. The innovations included bringing surgeons to the patients who need them, collaborating with partner organizations for surgical campaigns, and training and certifying two surgeons who can now train other new surgeons to increase the quality and quantity of surgical output. Trichiasis is the most severe stage of trachoma and can be corrected with a simple procedure performed on the eyelid.

The geography in South Sudan presents multiple challenges to locating patients and transporting them to and from the surgical sites. Steep, mountainous terrain in some locations,

seasonal weather patterns, and dispersed communities make movement difficult for both patients and surgeons. In July 2012 in Duk County, Jonglei state, the surgical team flew by charter plane and the entire campaign took place on foot with porters carrying the surgical equipment through knee-deep water and mud. In Lafon County, Eastern Equatoria state, health workers walked house to house in the mountains to identify and mobilize patients. Trichiasis patients were escorted to the road where a Carter Center vehicle transported them to the surgical site, reducing time and cost to the patient. In Duk, two surgeons operated on 185 patients; in Lafon, one surgeon operated on 70 patients.

In August 2012, The Carter Center conducted a joint campaign

with Sightsavers in Nyirol and Ayod counties, Jonglei state. Two Carter Center-supported surgeons were joined by three from Sightsavers. The teams flew to the sites by charter plane and carried out the campaign on foot. Three surgeons worked in Nyirol, while two worked in Ayod. The surgeons performed 490 surgeries in July and August 2012, 416 more than the same time period in 2011.

In September and October 2012, Dr. Aliotratra Robison from the Ruharo Eye Centre in Uganda certified two Carter Center-supported surgeons using World Health Organization criteria and prepared these surgeons to train and certify other surgeons. This training buttresses the sustainability of South Sudan's program.

# Trachoma

## Ninth MalTra Week Combats Trachoma, Malaria in Ethiopia's Amhara Region

The ninth semiannual MalTra week, which began on an unseasonably wet morning on Nov. 3, mobilized 16,840 health staff in 3,526 teams, targeting 7.4 million people in 62 districts in the five western zones of Amhara region, Ethiopia. MalTra week campaigns blanket alternating halves of the Amhara region with health workers who distribute Zithromax® (donated by Pfizer Inc) and tetracycline eye ointment to treat trachoma and provide malaria testing and treatment for everybody who needs it during two biannual campaigns.

Ethiopia has the highest number of people living in confirmed and suspected trachoma-endemic areas in the world, and Amhara has the greatest burden in Ethiopia.

The keynote address was delivered by his Excellency Ato Ayalew Gobeze, president of the Amhara region. He

noted that fighting trachoma was a 12-months-a-year project but cautioned that when the disease is finally under control, the distribution of free Zithromax would end. Thus, it was important for all heads of households to bring their families to the distribution to ensure that they did not miss the opportunity.

The remarks were recorded and subsequently broadcast over the Amhara and national television networks. Other addresses were delivered by the Honorable Dr. Tebebe Berhan for the Lions Clubs, Lebogang Tauyane for Pfizer Inc, and Dr. Paul Emerson for The Carter Center.

In 2012, five of 88 districts in western Amhara were not included in the campaign because assessments have shown that the prevalence of trachoma infection has fallen in these areas to a level that no longer requires mass drug

administration. Health administrators expressed disappointment that the distribution platform developed for MalTra weeks was not being used in these areas and asked whether it could be used for other community-based work. As the Amhara region approaches 2015, its target for elimination of blinding trachoma, the size of the targeted population should continue to decline as more of the 166 districts meet their elimination targets.

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**Ethiopia has the highest number of people living in confirmed and suspected trachoma-endemic areas in the world, and Amhara has the greatest burden in Ethiopia.**

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An assessment of drug distribution coverage following the previous MalTra week in April 2012 found that coverage reported by the distribution teams was marginally higher than that reported by the participants in the four districts assessed. One district from each zone will be randomly selected for a formal survey of Zithromax uptake after this campaign. Another addition to this campaign is the generation of lists of potential trichiasis patients for follow-up for surgical service by the Integrated Eye Care Workers.

The trachoma control program in Amhara is a collaboration between the Amhara Regional Health Bureau and the Lions-Carter Center SightFirst Initiative.



Paul Emerson

*Ato Ayalew Gobeze, president of Ethiopia's Amhara region, delivers the first dose of Zithromax, donated by Pfizer Inc, to launch the ninth semiannual MalTra week.*

# Trachoma

## Hilton Foundation Assesses Progress in Mali

Two representatives from the Conrad N. Hilton Foundation visited Mali Oct. 5–8 to observe progress toward the national elimination goals that the foundation has helped to support over the past four years.

The visit was hosted by the Mali national Blindness Prevention Program, The Carter Center, and Helen Keller International. Representing the Hilton Foundation were Dr. Shaheen Kassim-Lakha, director of International Programs, and Gregory Anderson, program officer of International Programs.

The three-day visit included field observations of the SAFE strategy for trachoma control (a four-pronged approach that includes surgery, antibiotics, facial cleanliness and health education, and environmental improvements) in several villages in two districts—Selingue, which is supported by The Carter Center, and Kolokani, which is supported by Helen Keller International. The delegation met with district-level health staff, trichiasis surgeons, and community health workers, who shared stories about implementing the SAFE strategy. They also observed several trichiasis surgeries and spoke with patients about the experience.

Further, conversations with managers and deejays at two radio stations provided insight on the reach of radio messages and the role they play in informing communities about the mechanics of trachoma prevention and the dates of key events like drug distribution and surgical campaigns.

The delegation also met with Mali's new minister of health, Dr. Soumana Makadji, where the Hilton

Foundation representatives affirmed their commitment to assist the national program in achieving its goal to eliminate blinding trachoma

by 2015. Dr. Makadji encouraged continued support and dedication by all partners and donors to end blinding trachoma in Mali.



Aryc Mosher

*The delegation meets with community health workers, masons, and women's groups to discuss challenges and successes in carrying out health education and latrine promotion in their communities.*



Sarah Bartlett

*A delegation traveled to Mali to assess progress toward elimination of blinding trachoma: (from left) Dr. Seydou Goita, Helen Keller International, Mali; Aryc W. Mosher, The Carter Center, Atlanta; Sadi Moussa, The Carter Center, Mali; Gregory Anderson, Conrad N. Hilton Foundation, Los Angeles; Yaya Kamissoko, The Carter Center, Mali; Emily Heck-Toubali, Helen Keller International, New York; Dr. Bamani Sanoussi, Blindness Prevention Program, Mali. Not pictured: Dr. Shaheen Kassim-Lakha, Conrad N. Hilton Foundation, Los Angeles; Dr. Mamadou Dembele, Blindness Prevention Program, Mali; Kathleen Tilford, Helen Keller International, Mali; Sarah Bartlett, The Carter Center.*

## LF Transmission Interrupted in Two Nigerian States

Surveys from May 2012 in Plateau and Nasarawa states, Nigeria, show that the transmission of lymphatic filariasis (LF), a mosquito-borne infection that causes elephantiasis, has been broken, meaning that the mass administration of medication to prevent the disease can be halted.

Since 1999, The Carter Center has worked closely with the Nigeria Ministry of Health to stop LF transmission in Plateau and Nasarawa states of central Nigeria (see Figure 2) using a strategy of annual mass drug administration of Mectizan,<sup>®</sup> donated by Merck, and albendazole, donated by GlaxoSmithKline. In recent years, the campaign has been supplemented by the distribution of long-lasting insecticidal bed nets in both states from the national malaria program.

Carter Center and Nigeria Ministry of Health staff conducted a transmission assessment survey in each of four evaluation zones established in the two-state area. More than 7,100 children were tested for LF in 173 schools. Based on these results, transmission of LF was judged to have been broken throughout the two states. This success is due to the efforts of local Ministry of Health personnel, The Carter Center, and community leadership. The federal Ministry of Health has directed that in 2013 mass drug administration

for LF can be halted in both Plateau and Nasarawa states and post-treatment surveillance launched.

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**This success is due to the efforts of local Ministry of Health personnel, The Carter Center, and community leadership.**

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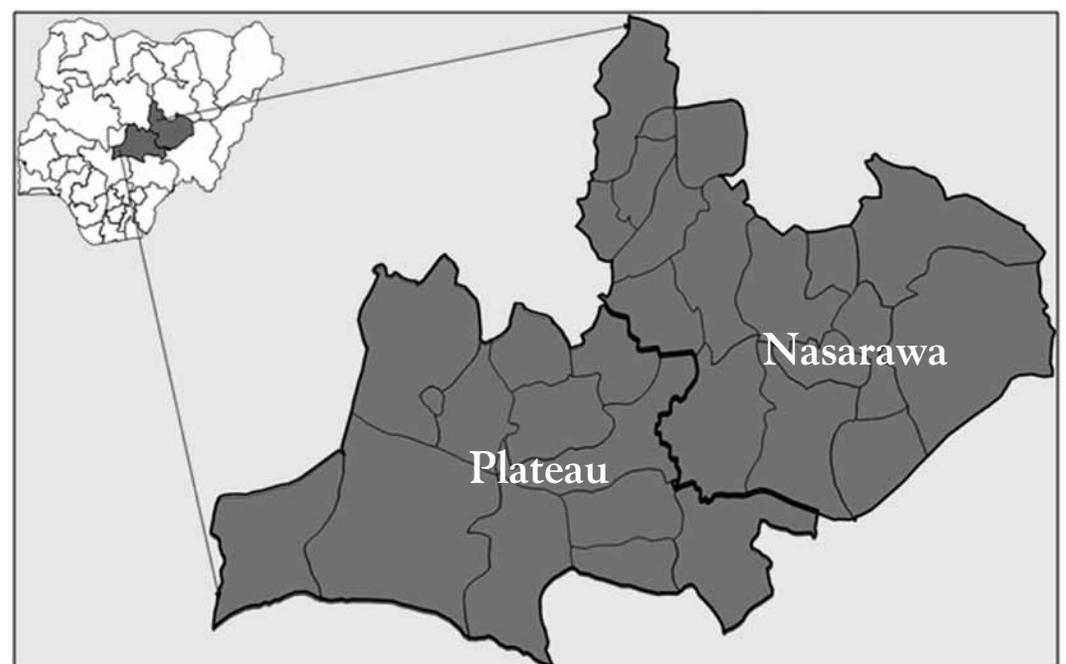
The World Health Organization guidelines for determining when LF transmission has been interrupted and mass drug administration can be safely stopped focus on testing the blood of 6- and 7-year-old schoolchildren for circulating filarial antigen in evaluation zones that have completed at least six years of mass drug administration, with treatment coverage at greater than or equal to 65 percent and where sentinel

site prevalence of LF microfilaremia has been driven below 1 percent. If circulating filarial antigen in children is under the threshold of 20 positive per evaluation zone, transmission is judged as having been interrupted, and mass drug administration can be halted.

LF afflicts Nigeria more than any other country in Africa, and Nigeria is ranked third—behind India and Indonesia—by the World Health Organization for the number of people at risk of acquiring the disease. The long history of the Carter Center's assistance to the Nigeria LF program has been well documented (Hopkins et al., *American Journal of Tropical Medicine and Hygiene*. 2002; 67:266–72; Richards et al., *PlosNTDS*. 2011; 5: e1346; King et al., *American Journal of Tropical Medicine and Hygiene*. 2012; 87:272–80).

Figure 2

Detail of Plateau and Nasarawa States, Nigeria, Where Transmission of Lymphatic Filariasis Has Been Halted



## Carter Center Supports Distribution of Nets in Nigeria

Since 2008, Nigeria's national malaria control program and its partners have undertaken the largest mass distribution of long-lasting insecticidal bed nets by any country to date. The goal of the campaign is the distribution of 63 million bed nets, enough to provide two to every household in Nigeria's 36 states plus the federal capital territory. With the completion of campaigns in all but three states nationwide as of September 2012, the end of the marathon distribution campaign in Nigeria is finally in sight.

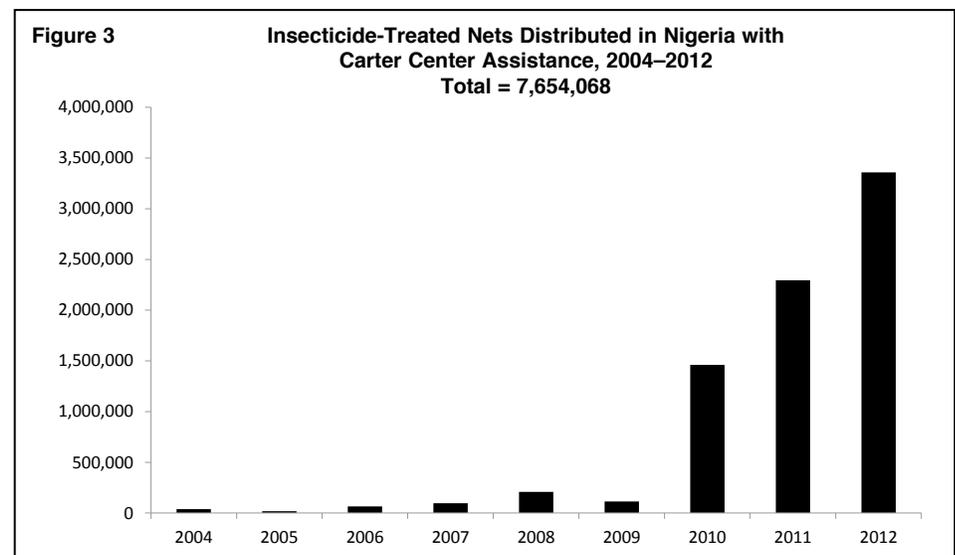
The Carter Center provided support for the distribution campaigns in Plateau state in 2010 and in Ebonyi and Enugu states in 2011, in which 4 million nets were distributed. Between July and September 2012, The Carter Center supported the distribution of 3.3 million additional nets in three states of southeastern Nigeria—Imo, Abia, and Edo—bringing the total number of nets distributed in Nigeria with Carter Center assistance to 7,654,068 since 2004 (see Figure 3).

The nets protect people from the biting mosquitoes that transmit not only malaria but also lymphatic filariasis. This is particularly important in Southeast Nigeria because it is not possible to conduct mass drug administration for lymphatic filariasis in much of that area given the risk of adverse events due to *Loa loa*, another parasitic infection for which treatment with ivermectin is contraindicated.

Net distribution in Imo, Abia, and Edo had been delayed for several years due to financial and logistical challenges. The Carter Center helped those states break through barriers

by coordinating a series of advocacy visits by Nigerian former head of state General Dr. Yakubu Gowon, who met with officials at the state and local government area levels and convinced decision makers to take action. As a result, the states and the local government areas agreed to contribute financial and in-kind resources to

make up funding gaps. Carter Center staff worked closely with the national malaria control program and Roll Back Malaria during the planning, training, distribution, and evaluation phases of the campaign, together finding ways to tackle all challenges to getting the nets out of the warehouses and over the sleeping spaces of millions of Nigerians.



## Dr. Emmanuel Miri Receives National Award

On Sept. 17, 2012, Dr. Emmanuel Miri, country representative for The Carter

Center in Nigeria since 1996, was bestowed the rank of Officer of the Order of the Federal Republic for

his contributions to the elimination of Guinea worm disease in Nigeria and the fight against other neglected tropical diseases. The Order of the Federal Republic medal is the third-highest national honor bestowed on Nigerian civilians; it was presented to Dr. Miri by President Goodluck Jonathan during a ceremony in Abuja.



*Dr. Emmanuel Miri (right) accepts a national award from Nigerian President Goodluck Jonathan.*

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## Global Health News

### Clarke Charity Event Funds 10,000 Bed Nets

A charity event by the Clarke Cares Foundation has raised enough funds, along with a matching donation from Clarke Mosquito Control, to provide 10,000 more insecticide-treated bed nets to The Carter Center (not including 88,900 nets already donated). The nets will help prevent lymphatic filariasis and malaria.

Held on Sept. 13, 2012, the foundation hosted a charity golf outing and banquet in Chicago, where Dr. Donald Hopkins, vice president for health programs at The Carter Center, delivered the keynote

address for 300 people. He discussed the ravages of mosquito-borne diseases and the importance of bed nets, which help provide a healthier future for people in impoverished communities and allow children a chance to grow up and flourish.

The Clarke Cares Foundation plans to continue supporting The Carter Center through its Net for Net project and welcomes organizations that would like to partner in a future endeavor. For more information, contact [clarkecares@clarke.com](mailto:clarkecares@clarke.com).



Sue Stout

*At a fundraising banquet held by the Clarke Cares Foundation, Dr. Donald Hopkins discusses the vital role insecticide-treated bed nets play in keeping communities healthy.*