Memorandum



Date: February 17, 2017

From: WHO Collaborating Center for Dracunculiasis Eradication, CDC

Subject: GUINEA WORM WRAP-UP #246

To: Addressees

# **Detect and Contain Every Guinea Worm Infection Immediately!!!**

## CHAD HOLDS ANNUAL REVIEW; FOCAL DISTRIBUTION OF DOG INFECTIONS



Chad reported provisional totals of 1,011 domestic dogs infected with Guinea worms (66% contained), 11 domestic cats (55% contained), and 16 human cases (56% contained) of Guinea worm disease in 2016 (Tables 1 and 2). A line-listing of the human cases was included in the previous issue. At the end of December 2016, Chad's Guinea Worm Eradication Program (GWEP) had 1,790 villages

under active surveillance (VAS), of which 342 were priority villages which had had a Guinea worm-infected human or animal since 2010. Most (74%) of the priority villages were in Chari Baguirmi (141) and Moyen Chari (112) Regions. Only 54 of the priority or priority-plus (had a GW-infected human or animal in 2015 or 2016) villages accounted for 613 (61%) of the 1,011 infected dogs reported in 2016. The number of infected dogs reported from each of those 54 villages ranged from 5 to 71 (Figures 1 and 2). Chad has reported 33 infected dogs and one infected cat in January 2017 (vs. 29 dogs and no cat in January 2016).

Figure 1 CHAD GUINEA WORM ERADICATION PROGRAM
DISTRIBUTION OF 1,011 DOG INFECTIONS WITH GUINEA WORMS AMONG 278 VILLAGES
REPORTING DOGS INFECTIONS DURING 2016\*

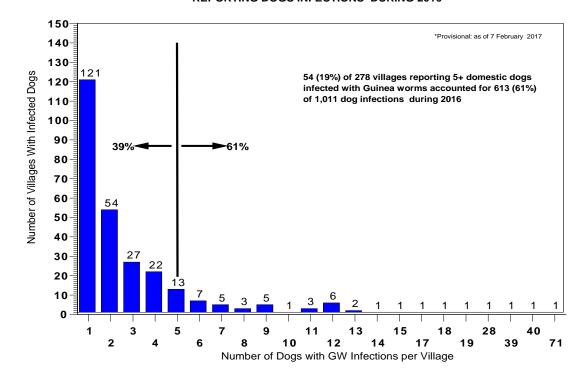
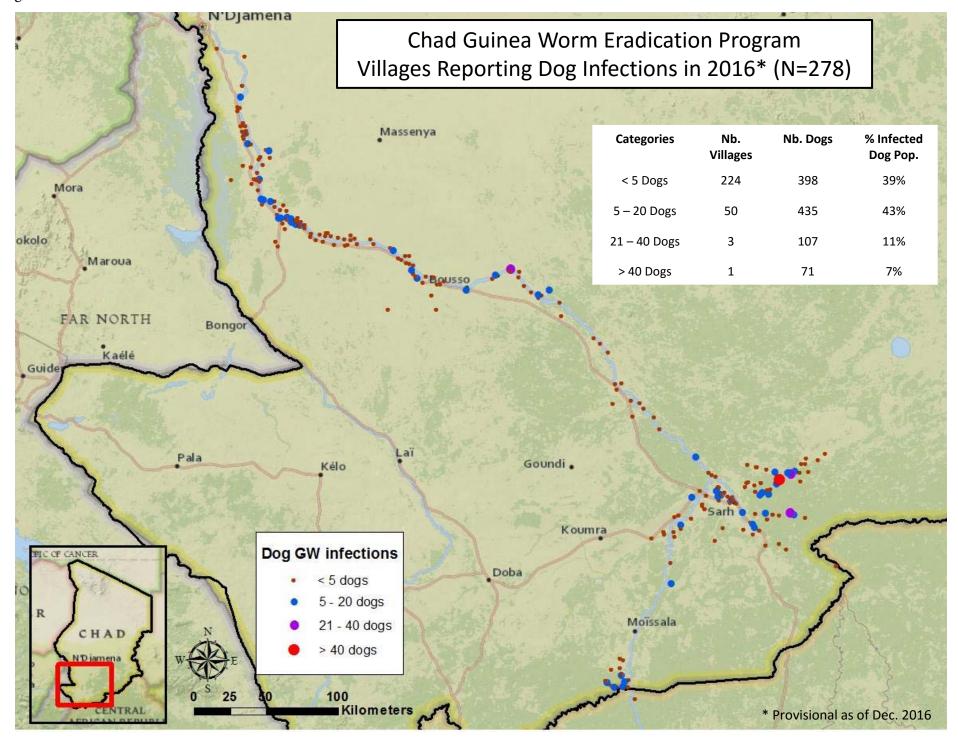


Figure 2



The GWEP began intensifying health education in some of the hyper-endemic villages in April 2015 to promote thorough cooking of aquatic animals, burying of fish guts, awareness of the cash rewards for reporting infected animals and humans, and tethering of infected dogs. The new demonstration project using topically-administered Advocate@ anti-helminthic to treat over 4,000 dogs in 88 villages monthly that began in October 2016 includes Danamadji and Kyabe districts in Moyen Chari Region, and an "intense sensitization" activity was completed in parts of Kyabe district in December. The revised project that began in September 2016 to test the efficacy of Heartgard@ administered monthly includes about 160 dogs in 7 villages of Chari Baguirmi and Mayo Kebbi Est Regions. The hyper-endemic villages are prioritized for roll out of the communications strategy being assisted by KYNE, a professional communications team, beginning in early April this year, and for more aggressive use of Abate.

Other on-going research pertaining to Chad continues to indicate that Guinea worms recovered from humans, dogs and cats in Chad are all closely related, with no separation by type of host and are genetically indistinguishable from Guinea worms recovered from humans in other countries. Molecular work to finalize genomic sequencing is on-going. Meanwhile studies are accumulating evidence that Guinea worm parasites in Chad use a paratenic host, by showing that several types of frogs and one species of catfish (*Synodontis*) are susceptible to Guinea worm infection, that *Dracunculus* third-stage infective larvae can survive in frog tissue for at least 6 months, and that the parasite can move up the food chain: laboratory ferrets can be infected if fed fish that recently ate (within 3-4 hours) infected copepods. Data from completed dog ecology studies in Chad are being analyzed.

Carter Center Vice President Dr. Dean Sienko led a delegation that included Dr. Ernesto Ruiz-Tiben, Ms. Melinda Denson, Mr. Adam Weiss, Dr. Hubert Zirimwabagabo, Dr. James Zingeser, Dr. Mark Eberhard and Mr. Christopher Cleveland to the annual National Guinea Worm Program Review meeting, which was held at the Ministry of Health in N'Djamena on January 19-20. Dr. Rohingalou Ndoundo (Director General of Sanitary Activities) of the Ministry of Health presided over the review, which was led by National Program Coordinator Dr. Tchindebet Ouakou and his deputy, Mr. Tchonfienet Moundai. Dr. Dieudonne Sankara who heads the Guinea Worm Eradication office at WHO headquarters also participated in the review, which included an overview by Dr. Tchindebet and reports by delegates from the five endemic regions (Chari Baguirmi, Moyen Chari, Mayo Kebbi Est, Mandoul, and Salamat), as well as updates on research pertaining to Chad and on preparations for the new communications effort assisted by the KYNE group. Dr. Tchindebet reported that 88% of almost 14,000 persons queried in villages under active surveillance during 2016 said they were burying fish entrails, while surveys of 502 persons found 53% and 46% were aware of the cash reward for reporting an infected human or dog, respectively. Chad's GWEP received 3,093 rumors of Guinea worm disease in 2016 (compared to 1,955 rumors in 2015), of which 2,915 (94%) were investigated within 24 hours. Dr. Eberhard and Mr, Christopher Cleveland from the University of Georgia remained in country for an additional week to collect more specimens for investigating the likely role of paratenic hosts in the unusual pattern of Guinea worm transmission in Chad.

The Government of Chad announced appointment of a new Minister of Health on February 6, 2017. She is the <u>Honorable Mme. Ngarbatina Carmel Sou IV</u>.

### MALI CONVENES NATIONAL REVIEW



Mali's Guinea Worm Eradication Program held its annual national Program Review in Bamako on January 25-26, 2017 with Honorable Minister of Health <u>Dr. Marie Madeleine Togo</u> presiding at the Opening Ceremony. The meeting was chaired by the president of Mali's National Certification Commission, <u>Prof. Abdel Kader Traore</u>, who was among six members (including <u>Dr. Alhousseini</u>

<u>Maiga</u>) of the 11-person national certification commission that participated. <u>Professor Ogobara Doumbo</u> of the International Commission for the Certification of Dracunculiasis Eradication also participated in the meeting. The review featured an overview of the program by National Program Coordinator <u>Dr. Mohamed Berthe</u>, as well as presentations by regional representatives from Segou, Mopti, Gao, Kidal, Timbuktu, and other regions, and a status report by the KYNE professional team on the new communications campaign they are helping to prepare for roll out in March 2017. Carter Center Vice President <u>Dr. Dean Sienko</u> led a delegation that included <u>Dr. Ernesto Ruiz-Tiben, Mr. Sadi Moussa, Mr. Adam Weiss, Dr. Hubert Zirimwabagabo and <u>Dr. James Zingeser.</u> The World Health Organization was represented by <u>Dr. Dieudonne Sankara</u> from WHO headquarters, <u>Dr. Andrew Seidu Korkor</u> from the Regional Office for Africa, and <u>Dr. Aboubacar Sidibe</u> from the WHO office in Bamako. Many members of the local media and press attended and reported on the Opening Ceremony.</u>

Mali's provisional report for 2016 still stands at ZERO cases of Guinea worm disease in humans and 11 infected dogs, of which 8 dogs (73%) were contained (not 9 dogs contained, as reported in the line listing in the previous issue: the 10<sup>th</sup> dog was <u>not</u> contained). Mali's GWEP is seeking to reconcile the alleged geographic origins of the 11 infected dogs, all but one of which were imported into Tominian district of Segou Region, either only from Tenenkou district of adjacent Mopti Region or from Tenenkou, Youwarou, Djenne, and Mopti districts of Mopti Region. The distinction is important, in order to know where the dogs got infected and where transmission may be still occurring. Unfortunately, all four districts, especially Tenenkou, are currently insecure and relatively inaccessible to the program. The six villages in Tominian district where the infected dogs were detected are accessible to the program. Mali reported no cases of GWD and no infected dogs in January 2017 (Table 1).

All patients who had GWD in Mali in 2015 are still being monitored by the program several times each month. With support from the German Non-Governmental Organization HELP, repairs of the water system in the settlement of Tanzikratene (Gao Region), which reported 29 of Mali's cases in 2014, and 3 of Mali's 5 cases in 2015, were completed on February 7, 2017. THANK YOU, HELP!!!! Mali has reported a cumulative total of 570 rumors of GW cases in 2016, all of which were reportedly investigated within 24 hours. Of 1,635 persons queried in all three surveillance levels in December (only 10 of them in level I), 1,197 (73%) were aware of the cash reward for reporting an infected person; all of the 10 persons queried in level I villages were aware of the reward for reporting and tethering an infected dog. Mali's GWEP has developed a segment broadcast on national television describing achievement of zero cases of Guinea worm disease nationwide and the cash reward and asking viewers to report any rumors of the disease. The program is considering a plan to organize a high level event led by the minister of health to publicize Mali's zero case achievement during 2016 and the launching of the new nationwide communications campaign in March.

## ETHIOPIA: NO CASE IN HUMANS, ONE INFECTED BABOON IN JANUARY 2017

After reporting a provisional total of 14 infected dogs (71% contained), 2 infected baboons and 3 infected humans (67% contained) in 2016, Ethiopia has reported no infected humans or dogs but one infected baboon in January 2017 (Tables 1 and 2). The immature baboon, which had ten Guinea worms, was killed on a farm in Ablen village in Atheti sub-district of Gog district, Gambella Region by a dog and its owner on January 11. The owner of the dog that killed the baboon in January 2017 also owned 2 of the dogs that had Guinea worm infections in Ablen in 2016 (one dog was contained, the other was not). No one in the dog owner's family had Guinea worm disease but his uncle also owned an infected dog in 2016 (in Atheti village in December). Ablen reported 1 unconfirmed baboon infection in August 2014; 1 confirmed baboon infection in June and 1 contained dog infection in September 2015; 1 uncontained dog infection in June and 2 contained dog infections in September - November 2016. Atheti village very close by had 2 infected dogs in 2013, 2 in 2014, 7 in 2015, and 7 in 2016.

Ablen had a population of 229 people and 42 resident dogs in 2016. All known ponds in Ablen were reportedly treated with Abate "since 2015", including new water sources found throughout the year, and Abate was also applied there in April-October 2016. All known stagnant water sources in and around Ablen were dried up during the other five months of 2016. Ethiopia reported a cumulative total of 8,968 rumors in 2016, of which 8,287 (99%) were investigated within 24 hours.

### SOUTH SUDAN GWEP HOLDS ANNUAL REVIEW MEETING IN KAPOETA



South Sudan's Guinea Worm Eradication Program (SSGWEP) held its 11th annual Program Review in Kapoeta on January 10, 2017. The program has reported a provisional total of 6 cases (3 contained) from four villages and no infected animals in 2016 (Table 1). Five of the 6 the patients were of the Luo (name preferred to "Jur Chol") ethnic group and one was Dinka. All were located in areas west of the Nile River (Table 3). Abate was applied within five days or less to water sources associated with all 3 uncontained cases. There were no cases

in humans and no infected animals in January 2017. The SSGWEP plans to conduct a census of dogs in all Level I surveillance areas by March 2017 and is planning to implement a reward for reporting/containing dogs infected with GWs. The review was led by the Director of the SSGWEP, Mr. Samuel Makoy Yibi under the auspices of the State Minister for Health, Honorable Lorika Stella Brenda. Participants at the review included State Minister of Information Honorable Josephine Nakuru Ambrose, the UNICEF WASH Officer based at Torit, South Sudan, Ms. Sonia Poni, and a Carter Center team led by Mr. Adam Weiss, Ms. Sarah Yerian and Ms. Giovanna Steel. Mr. Makoy and the Carter Center team also conducted a three-day capacity building training on January 7-9 in association with the internal review, for South Sudanese Senior Program Officers, Program Officers, and State Field Coordinators to help strengthen their technical and administrative skills. The Carter Center also hosted a one-day meeting in Kampala, Uganda on January 12 to provide an overview of the 11<sup>th</sup> Annual Review meeting. Representatives of the KYNE professional communications team attended, together with The Carter Center team led by Mr. Craig Withers, with Ms. Sarah Yerian, Ms. Giovanna Steele, Mr. Adam Weiss, Dr. Hubert Zirimwabagabo, and Dr. James Zingeser. To ascertain compliance with program implementation procedures by GWEP local staff during a period (July-November) precluding supervisory visits.

Table 1

#### Number of Laboratory-Confirmed Cases of Guinea Worm Disease, and Number Reported Contained by Month during 2017\*

(Countries arranged in descending order of cases in 2016)

COUNTRIES WITH ENDEMIC	NUMBER OF CASES CONTAINED / NUMBER OF CASES REPORTED											% CONT.		
TRANSMISSION	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL*	1
CHAD	0 / 0	/	/	/	/	/	/	/	/	/	/	/	0 / 0	
SOUTH SUDAN	0 / 0	/	/	/	/	/	/	/	/	/	/	/	0 / 0	
ETHIOPIA	0 / 0	/	/	/	/	/	/	/	/	/	/	/	0 / 0	
MALI §	0 / 0	/	/	/	/	/	/	/	/	/	/	/	0 / 0	
TOTAL*	0 / 0	/	/	/	/	/	/	/	/	/	/	/	0 / 0	
% CONTAINED	0%												0%	

#### \*Provisional

Cells shaded in black denote months when zero indigenous cases were reported. Numbers indicate how many imported cases were contained and reported that month. Cells shaded in yellow denote months when a case of GWD did not meet all case containment standards.

§Reports include Kayes, Koulikoro, Segou, Sikasso, and Mopti, Tinbuktu, Gao, and Kidal Regions; reports from Kidal Region are contingent on security conditions during 2017 and times when the GWEP is able to deploy a technical advisor to Kidal Region to oversee the program there.

#### Number of Laboratory-Confirmed Cases of Guinea Worm Disease, and Number Reported Contained by Month during 2016\*

COUNTRIES WITH ENDEMIC		NUMBER OF CASES CONTAINED / NUMBER OF CASES REPORTED														
TRANSMISSION	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL*			
CHAD	0 / 0	1 / 1	0 / 0	1 / 1	1 / 1	0 / 1	1 / 2	1 / 3	1 / 2	3 / 4	0 / 0	0 / 1	9 / 16	56%		
MALI <sup>§</sup>	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0%		
SOUTH SUDAN	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	3 / 4	0 / 0	0 / 0	0 / 1	0 / 0	0 / 1	0 / 0	3 / 6	50%		
ETHIOPIA	0 / 0	0 / 0	0 / 0	0 / 0	1 / 1	1 / 1	0 / 0	0 / 0	0 / 1	0 / 0	0 / 0	0 / 0	2 / 3	67%		
TOTAL*	0 / 0	1 / 1	0 / 0	1 / 1	2 / 2	4 / 6	1 / 2	1 / 3	1 / 4	3 / 4	0 / 1	0 / 1	14 / 25	56%		
% CONTAINED	0%	100%	0%	100%	100%	67%	50%	33%	25%	75%	0%	0%	56%			

#### \*Provisional

Cells shaded in black denote months when zero indigenous cases were reported. Numbers indicate how many imported cases were contained and reported that month. Cells shaded in yellow denote months when a case of GWD did not meet all case containment standards.

§Reports include Kayes, Koulikoro, Segou, Sikasso, and Mopti, Tinbuktu, Gao, and Kidal Regions; reports from Kidal Region are contingent on security conditions during 2016 and times when the GWEP is able to deploy a technical advisor to Kidal Region to oversee the program there.

Table 2

## GUINEA WORM INFECTIONS AND CONTAINMENT IN DOGS AND OTHER ANIMALS: 2016\*

COUNTRIES REPORTING DOG		NUMBER OF DOGS CONTAINED / NUMBER OF DOGS INFECTED														
INFECTIONS	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE^	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL*	CONT		
CHAD VAS: L1 + L2	23 / 29	41 / 65	95 / 122	86 / 118	117 / 156	97 / 141	75 / 115	43 / 81	38 / 63	22 / 39	3 / 11	9 / 11	649 / 951	68%		
CHAD VNAS: L3	0 / 0	0 / 3	0 / 0	0 / 0	0 / 2	3 / 20	6 / 19	4 / 8	1 / 2	1 / 5	1 / 1	0 / 0	16 / 60	27%		
CHAD Total	23 / 29	41 / 68	95 / 122	86 / 118	117 / 158	100 / 161	81 / 134	47 / 89	39 / 65	23 / 44	4 / 12	9 / 11	665 / 1011	66%		
% CONTAINED	79%	60%	78%	73%	74%	62%	60%	53%	60%	52%	33%	82%	66%			
				1 domestic cat	1 domestic cat	1 domestic cat	1 domestic cat	5 domestic cats	1 domestic cat			1 domestic cat				
ETHIOPIA VAS L1+L2	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 2	3 / 5	2 / 2	3 / 3	0 / 0	1 / 1	1 / 1	10 / 14	71%		
ETHIOPIA VNAS L3	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0%		
TOTAL	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 2	3 / 5	2 / 2	3 / 3	0 / 0	1 / 1	1 / 1	10 / 14	71%		
% CONTAINED	0%	0%	0%	0%	0%	0%	60%	100%	100%	0%	100%	100%	71%			
							1 baboon	1 baboon	1			•				
									<u>.</u>							
MALI VAS L1+L2	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	1 / 1	1 / 2	1 / 1	4 / 5	1 / 2	0 / 0	0 / 0	8 / 11	73%		
MALI VNAS L3	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0%		
TOTAL	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	1 / 1	1 / 2	1 / 1	4 / 5	1 / 2	0 / 0	0 / 0	8 / 11	73%		
% CONTAINED	0%	0%	0%	0%	0%	100%	50%	100%	80%	50%	0%	0%	73%			
SOUTH SUDAN VAS L1+L2	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0%		
SOUTH SUDAN VNAS L3	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0%		
TOTAL	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0%		
% CONTAINED	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%			
TOTAL VAS L1+L2	23 / 29	41 / 65	95 / 122	86 / 118	117 / 156	98 / 144	79 / 122	46 / 84	45 / 71	23 / 41	4 / 12	10 / 12	667 / 976	68%		
TOTAL VNAS L3	0 / 0	0 / 3	0 / 0	0 / 0	0 / 2	3 / 20	6 / 19	4 / 8	1 / 2	1 / 5	1 / 1	0 / 0	16 / 60	27%		
GRAND TOTAL	23 / 29	41 / 68	95 / 122	86 / 118	117 / 158	101 / 164	85 / 141	50 / 92	46 / 73	24 / 46	5 / 13	10 / 12	683 / 1036	66%		

<sup>\*</sup> Provisional

VAS = Villages under active surveillance.
VNAS = Villages not under active surveillance
Text in italics denote worm specimen confirmation is pending,
Denotes uncontained dogs

## Table 3

## South Sudan GWEP Line Listing of Cases 2016\*

#	Village or Locali	ity of De	tection					Date GW	Case Cor	ntained?	nous	Home Villa	Home Village or Locality		Pres	umed Source of Infection Identified?	Presumed Source of Infection is a Known EVA?		
Case #	Name	1 = EVAS	2 = NEVAS	Payam	County	Age	Sex	Emerged (D/M/Y)	(Yes, No, or Pending)	If No, Date of Abate Rx*	1 = Imported 2= Indigenous	Name	1 = EVAS	2 = NEVAS	(Yes / No)	Description	(Yes / No)	Actions?	
1.1	RUMCHIETH	1		WUNLIT	TONJ EAST	29	F	04/06/16	NO	4/Jun/16	2	RUMCHIETH	1		YES	RUMCHIETH	YES	ABATE WAS ALREADY APPLIED, BANDAGING AND HEALTH EDUCATION DONE	
2.1								09/06/16											
2.2	ANGON	1		UDICI	JUR RIVER	13	F	02/07/16	YES	NA	2	ANGON	1		YES	WATER SOURCES AROUND THE	YES	ABATE WAS ALREADY APPLIED, BANDAGING	
2.3								06/07/16								HOUSEHOLD IN ANGON		AND HEALTH EDUCATION DONE	
2.4								26/09/16											
3.1								25/06/16											
3.2								03/07/16								WATER SOURCES AROUND THE		ABATE WAS ALREADY APPLIED, BANDAGING	
3.3	ANGON	1		UDICI	JUR RIVER	26	M	05/07/16	YES	NA	2	ANGON	1		YES	HOUSEHOLD IN ANGON	YES	AND HEALTH EDUCATION DONE	
3.4								17/07/16	=										
3.5								25/09/16											
4.1								27/06/16	=										
4.2								28/06/16 01/07/16											
4.3	ANGON	1		UDICI	JUR RIVER	47	F	09/07/16	YES	NA	2	ANGON	1		YES	WATER SOURCES AROUND THE	YES	ABATE WAS ALREADY APPLIED, BANDAGING	
4.4	ANGON	1		ODICI	JON NIVER	47	'	24/07/16	123	INA	2	ANGON	-		1123	HOUSEHOLD IN ANGON	123	AND HEALTH EDUCATION DONE	
4.6								28/08/16											
4.7								14/09/16											
5.1								11/09/16									YES		
5.2	PARIENG CC		2	PAWENG	TONJ EAST	14	М	25/10/16	NO	19/09/16	1	PALOR		2	NO	STILL UNDER INVESTIGATION	NO		
6.1	KHOR JAMUS			ROC ROC DONG	JUR RIVER	18	F	20/11/16	NO	26/11/16	1	KHOR JAMUS		2	NO	STILL UNDER INVESTIGATION			

<sup>\*</sup> Provisional

NEVS = Non Endeimic Villages Gardens = Farming areas of villages CC = Cattle Camp

CCC = Case Containment Center

an assessment was conducted in nine villages from Jie, Kassingor and Boma Payams (sub-districts) East of the Nile with three objectives: 1) Ascertain the extent of SSGWEP staff compliance with the implementation of the standard operating procedures; 2) Assess the accuracy of the program's reporting system; and 3) Assess cash reward awareness among residents. Outcomes indicate that 153 (91%) of 168 residents interviewed were aware of the cash reward for reporting a case of GWD. Results on the accuracy of the reporting system and staff compliance were reassuring, and were presented at the review meeting and incorporated into the capacity building training.

# CARTER CENTER HOSTS ATLANTA DEBUT OF "COUNTDOWN TO ZERO" **EXHIBITION**

THE



CARTER CENTER Former U.S. President Jimmy Carter led a series of events on January 11, 2017 to mark the Atlanta debut of "Countdown to Zero: An Exhibition of Photographs and Artifacts". This is a version of the exhibit unveiled at the American Museum of Natural History (AMNH) in New York City in January 2015. Curated by Dr. Mark Siddall of the AMNH in cooperation with The

Carter Center (co-curator Dr. Donald Hopkins, project lead Ms. Emily Staub) with an emphasis on the Guinea worm eradication campaign, the popular original exhibition in New York was scheduled to run for six months but is now scheduled to end later this year after two and a half years. The exhibit at the Jimmy Carter Presidential Library and Museum will run through December 2017. (A replication of the exhibition is slated to open in the United Arab Emirates in late 2017). President Carter also participated in a well-attended Press Conference to announce the provisional results of Guinea worm cases reported in 2016, attended a reception for many current and former Guinea Worm Warriors, donor representatives and other guests, and headlined a "Conversations at The Carter Center" panel discussion chaired by Dr. Sanjay Gupta of CNN that also included CDC Director Dr. Tom Frieden, Dr. Siddall, and Dr. Hopkins.

The "Conversations" panel discussion was live-streamed, and may be viewed at: https://video.cartercenter.org/Default.aspx?youtube\_id=d5f4Xif4WkE&category=CarterCenterC onversations&filter=

Α video of the Press Conference be viewed may at: https://www.facebook.com/cartercenter/videos/10154687102971005/

The on-line exhibition may be viewed at: <a href="http://www.amnh.org/explore/science-topics/disease-">http://www.amnh.org/explore/science-topics/disease-</a> and-eradication/countdown-to-zero

### **TRANSITIONS**

In January 2017 **Mali** Minister of Health <u>Dr. Marie Madeleine Togo</u> appointed former National Program Coordinator of Mali's GWEP <u>Dr. Gabriel Guindo</u> as the new Regional (Health) Director for Segou Region. This appointment is intended to make use of Dr. Guindo's knowledge and experience with Guinea worm disease to help ensure interruption of transmission in the Region where Tominian district detected 11 dogs with Guinea worm infections in 2016 and one human case in 2015. Congratulations, Dr. Guindo!!!

In January 2017 Mr. Steve Becknell, who was the Carter Center's first Resident Advisor to the GWEP of South Sudan, transferred from Hanoi, Vietnam to Addis Ababa, **Ethiopia**, where he is Deputy Director of the Centers for Disease Control and Prevention's office in Ethiopia.

### **MEETINGS**

- 21<sup>st</sup> International Review Meeting of GWEP Program Managers: March 20-21, 2017 at The Carter Center, Atlanta
- Annual Ministerial Meeting on Guinea Worm Eradication: Wednesday, May 24, 2017, from 6 PM to 8 PM, during the World Health Assembly in Geneva

### RECENT PUBLICATIONS

Greenwood B, Greenwood A, Bradley A, 2017. Guinea worm infection in northern Nigeria: reflections on a disease approaching eradication. *Tropical Medicine and International Health* (in press).

Inclusion of information in the Guinea Worm Wrap-Up does not constitute "publication" of that information.

In memory of BOB KAISER

Note to contributors: Submit your contributions via email to Dr. Sharon Roy (gwwrapup@cdc.gov) or to Dr. Ernesto Ruiz-Tiben (eruizti@emory.edu), by the end of the month for publication in the following month's issue. Contributors to this issue were: the national Guinea Worm Eradication Programs, Drs. Donald R. Hopkins and Ernesto Ruiz-Tiben of The Carter Center, Drs. Sharon Roy of CDC, Dr. Dieudonné Sankara of WHO, and Dr. Mark Eberhard. WHO Collaborating Center for Dracunculiasis, Eradication, Center for Global Health, Centers for Disease Control and Prevention, Mailstop C-09, 1600 Clifton Road NE, Atlanta, GA 30329, USA, email: gwwrapup@cdc.gov, fax:

http://www.cdc.gov/parasites/guineaworm/publications.html#gwwp

404-728-8040. The GW Wrap-Up web location is

Back issues are also available on the Carter Center web site English and French are located at <a href="http://www.cartercenter.org/news/publications/health/guinea\_worm\_wrapup\_english.html">http://www.cartercenter.org/news/publications/health/guinea\_worm\_wrapup\_english.html</a>. <a href="http://www.cartercenter.org/news/publications/health/guinea\_worm\_wrapup\_francais.html">http://www.cartercenter.org/news/publications/health/guinea\_worm\_wrapup\_francais.html</a>



CDC is the WHO Collaborating Center for Dracunculiasis Eradication