



Date: August 8, 2014

From: WHO Collaborating Center for
Research, Training and Eradication of Dracunculiasis, CDC

Subject: GUINEA WORM WRAP-UP #227

To: Addressees

Contain Every Worm!!! Trace Every Source!! Raise Reward Awareness!

**STATUS OF ERADICATION AND OF REPORTED CASES OF GWD WORLDWIDE
DURING JANUARY-JULY 2014**

Three of the four remaining endemic countries have provisionally reported a total of 53 cases during January-July 2014, which is a reduction of 51% from the 109 cases reported in January-July 2013 (Figure 1, Table 1, Figure 2); 39 (74%) of this year's cases so far were reportedly contained. South Sudan reported 43 cases, Chad 8 cases, and Ethiopia 2 cases. Mali, which reported 4 cases in January – July 2013, has reported no cases during this period of 2014, and Sudan, which reported 2 cases in June 2013 but is not endemic, also has reported no cases so far this year.

Figure 1

Reported Cases of Dracunculiasis by Country during January - July 2013 and 2014*

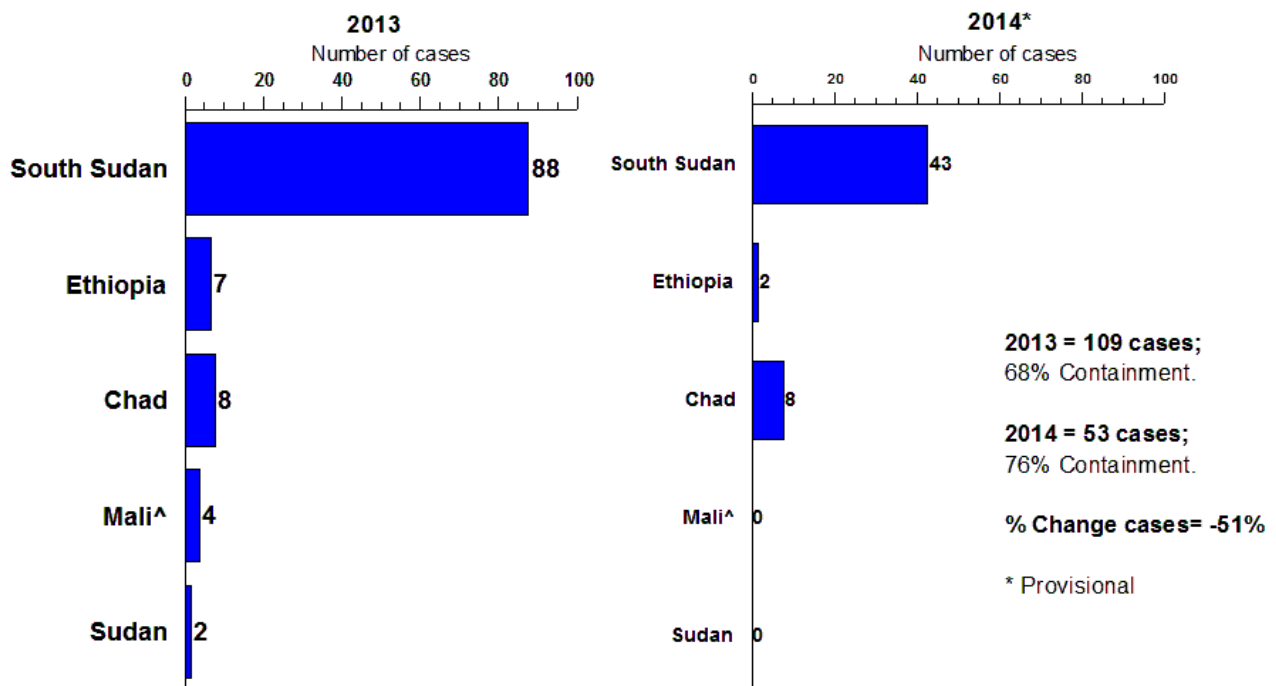


Table 1

Number of Reported Cases of Guinea Worm Disease Contained and Number Reported by Month during 2014*
(Countries arranged in descending order of cases in 2013)

COUNTRIES WITH ENDEMIC TRANSMISSION	NUMBER OF CASES CONTAINED / NUMBER OF CASES REPORTED													% CONT.
	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL*	
SOUTH SUDAN	0/0	0/0	3/3	3/4	3/4	6/8	17/24	/	/	/	/	/	32/43	74
CHAD	1/1	1/1	1/1	1/1	0/1	0/1	1/2	/	/	/	/	/	5/8	63
MALI [§]	0/0	0/0	0/0	0/0	0/0	0/0	0/0	/	/	/	/	/	0/0	0
ETHIOPIA	0/0	0/0	0/0	0/0	0/0	2/2	0/0	/	/	/	/	/	2/2	100
TOTAL*	1/1	1/1	4/4	4/5	3/5	8/11	18/26	0/0	0/0	0/0	0/0	0/0	39/53	74
% CONTAINED	100	100	100	80	60	73	69						74	

COUNTRIES REPORTING CASES	NUMBER OF CASES CONTAINED / NUMBER OF CASES REPORTED													% CONT.
	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL*	
SUDAN	/	/	0/0	0/0	0/0	0/0	0/0	/	/	/	/	/	0/0	0%

TOTAL	1/1	1/1	4/4	4/5	3/5	8/11	18/26	0/0	0/0	0/0	0/0	0/0	39/53	74
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*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 transmission of GWD from one or more cases was not contained.

[§]Reports include Kayes, Koulikoro, Segou, Sikasso, and Mopti, Timbuktu and Gao Regions; in late April, the GWEP deployed one technical advisor to Kidal to oversee the program during the transmission season (for the first time since 2012).

[^]A Carter Center consultant, deployed to Kafia-Kingi area in South Darfur in March, implemented active village-based surveillance in Kafia-Kingi and four other at-risk villages, and began monthly reporting.

Number of Reported Cases of Guinea Worm Disease Contained and Number Reported by Month during 2013*
(Countries arranged in descending order of cases in 2012)

COUNTRIES WITH ENDEMIC TRANSMISSION	NUMBER OF CASES CONTAINED / NUMBER OF CASES REPORTED													% CONT.
	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL*	
SOUTH SUDAN [^]	0/0	1/2	1/4	18/25	19/24	13/19	8/14	7/11	7/11	2/3	0/0	0/0	76/113	67
CHAD	0/0	0/0	0/0	3/3	1/1	0/1	3/3	1/1	0/0	0/0	0/3	0/2	8/14	57
MALI [§]	0/0	0/0	0/0	0/0	0/3	1/1	0/0	0/0	1/1	1/2	4/4	0/0	7/11	64
ETHIOPIA	1/1	0/0	0/0	0/1	3/4	0/1	0/0	0/0	0/0	0/0	0/0	0/0	4/7	57
TOTAL*	1/1	1/2	1/4	21/29	23/32	14/22	11/17	8/12	8/12	3/5	4/7	0/2	95/145	66
% CONTAINED	0	50	25	72	72	64	65	67	67	60	57	0	66	

COUNTRIES REPORTING CASES	NUMBER OF CASES CONTAINED / NUMBER OF CASES REPORTED													% CONT.
	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL*	
SUDAN	/	/	/	/	/	2/2	/	/	1/1	/	/	/	3/3	0%

TOTAL	1/1	1/2	1/4	21/29	23/32	16/24	11/17	8/12	9/13	3/5	4/7	0/2	98/148	66
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*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.

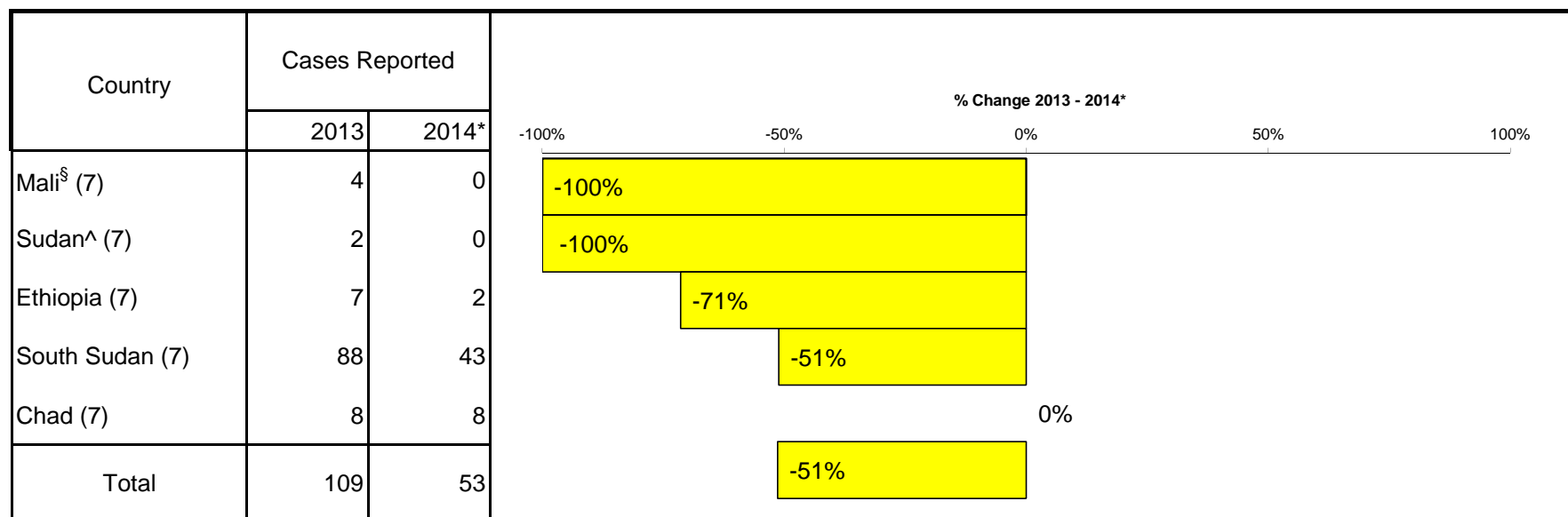
Cells shaded in yellow denote months when transmission of GWD from one or more cases was not contained.

[^] The South Sudan GWEP ceased operations on December 16, 2013 as a result of armed conflicts and insecurity. However, village volunteers and local supervisory staff remained in place and continued village-based surveillance throughout December, when zero cases of GWD were reported. Full operations resumed in January 2014.

[§] Since April 2012 reports include only Kayes, Koulikoro, Segou, Sikasso, and Mopti Regions; the GWEP was not fully functional in Timbuktu, and Gao Regions throughout 2013, and not at all in Kidal Region.

Figure 2

Number of Indigenous Cases Reported During the Specified Period in 2013 and 2014*,
and Percent Change in Cases Reported



* Provisional: Numbers in parentheses denote months for which data received, e.g., (7)= January- July

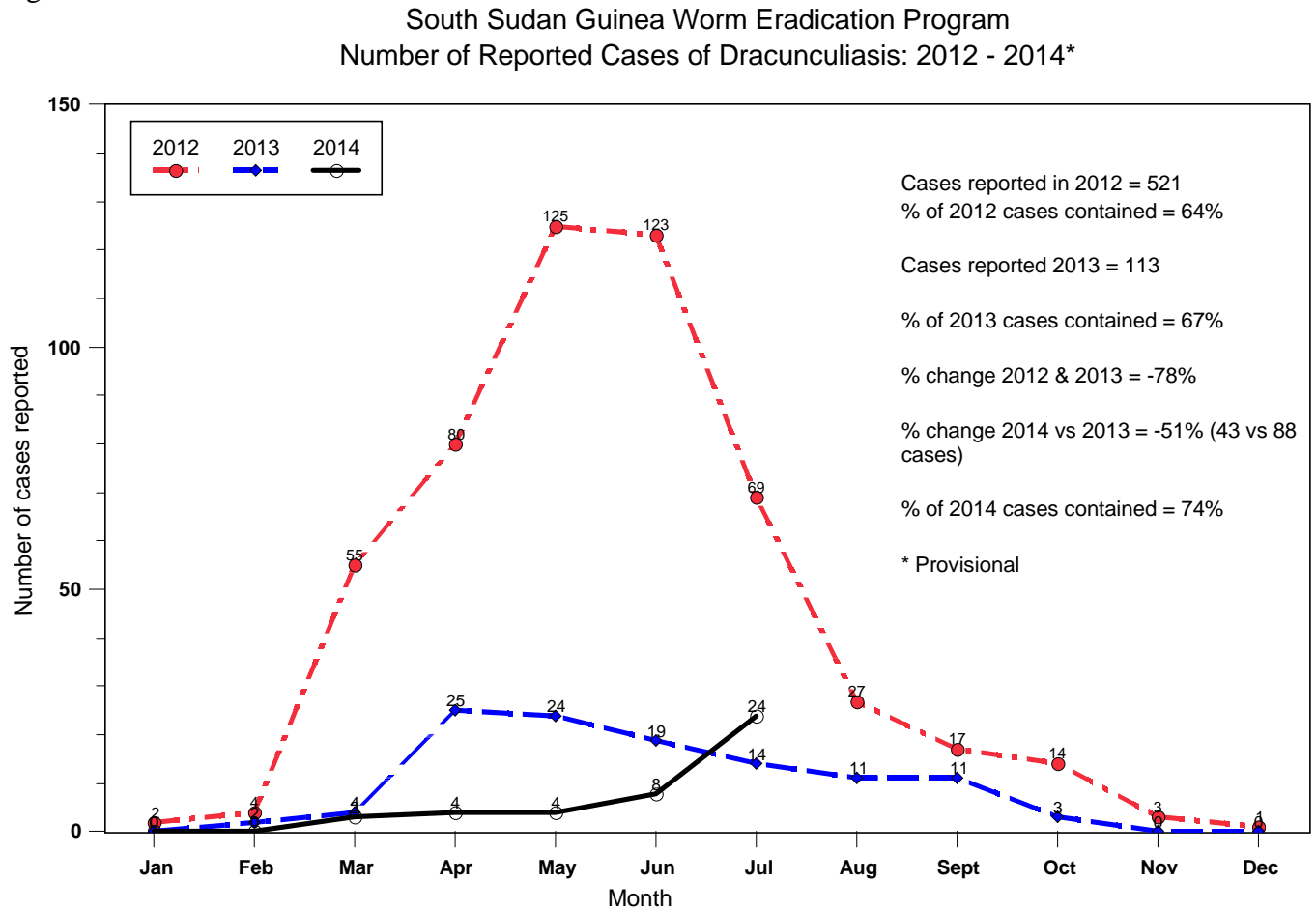
§ Reports include Kayes, Koulikoro, Segou, Sikasso, and Mopti, Tinbuktou and Gao Regions; in late April 2014, the GWEP deployed one technical advisor to Kidal to oversee the program during the transmission season (for the first time since 2012).

^ Under pre-certification of eradication; reported three cases in 2013 from Kafia Kingi area of South Darfur State. A Carter Center consultant was deployed to Kafia-Kingi area in March 2014 to implement active village-based surveillance and interventions in Kafia Kingi and four other at-risk villages, all of which began reporting monthly as of the end of March.

SOUTH SUDAN: STILL LEADING THE WAY

Continuing to make progress on its march to zero cases of Guinea worm disease GWD, the South Sudan Guinea Worm Eradication Program (SSGWEP) has reported 43 cases in January-July 2014, compared to 88 cases during the same period of 2013, for a reduction of 51% so far this year (Figure 3). Thirty-two (74%) of this year's 43 cases were contained, compared to 68% of cases contained in the first seven months of 2013. Sixteen of 24 cases in July 2014 were reported from Kapoeta East County, Eastern Equatoria State (EEQS); six cases from Awerial County in Lakes State; and one case each from Kapoeta North County, EEQS and from Tonj East county of Warrap State. CDC has confirmed worm specimens submitted for 19 of the 19 cases reported in South Sudan during January-June (Table 2). Worm specimens for the 24 alleged cases in July are pending or already at CDC. In 2014 the SSGWEP is monitoring 4,710 villages under active surveillance, including 429 cattle camps.

Figure 3



Strong support of the SSGWEP by ministry of health and political leaders at national and state levels is one reason for this program's achievements. In another important manifestation of that support, beginning on April 3rd, 2014, the Eastern Equatoria State Minister of Health, the Honorable Dr. Margaret Itto, accompanied by the Commissioner of Kapoeta East County Hon. Titus Lokwachuma

Table 2

**South Sudan Guinea Worm Eradication Program
Line Listing of Cases of GWD during 2014***

Case #	Village or Locality of Detection			Payam	County	Age	Sex	Date GW Emerged	Case Contained?		1 = Imported 2 = Indigenous	Home Village or Locality			Presumed Source of Infection Identified?		Presumed Source of Infection is a Known EVA?		Worm Specimen	
	Name	1 = EVAS	2 = NEVAS						(Yes, No, or Pending)	If No, Date of Abate Rx*		Name	1 = EVAS	2 = NEVAS	(Yes / No)	Description	(Yes / No)	Actions?	Date sent to CDC	Diagnosis
1.1	CHOKOIN		2	KAUTO	KAPOETA EAST	14	F	11/Mar/14	YES		2	CHOKOIN		2	YES	INFECTED IN HOME GARDEN AREA, WITHIN THE KALOBELENY/POONGO II ENDEMIC CLUSTER	YES	PART OF KALOBELENY/POONGO II ENDEMIC CLUSTER (2 CASES 2013)	30-Apr	GUINEA WORM
1.2								19/Apr/14	YES										30-Apr	GUINEA WORM
2.1	LOCHAPIO		2	KAUTO	KAPOETA EAST	32	F	18/Mar/14	YES		2	LOCHAPIO		2	YES	NAWAYAPETA GARDENS OR LAPALAP (CC WHICH BORDERS THE NAWAYAPETA ENDEMIC CLUSTER)	YES	PART OF NAWAYAPETA ENDEMIC CLUSTER (7 CASES 2013); BOTH CC AND GARDEN AREAS BEING TREATED WITH ABATE AND SUBJECTED TO REGULAR CASE SEARCHES	30-Apr	GUINEA WORM
2.2								17/Apr/14	YES										30-Apr	GUINEA WORM
3.1	LOBOER		2	KAUTO	KAPOETA EAST	10	F	25/Mar/14	YES		2	LOBOER		2	YES	INFECTED IN HOME GARDEN AREA, WITHIN THE KALOBELENY/POONGO II ENDEMIC CLUSTER	YES	THE ABATE TEAM TREATED ALL WATER SOURCES LINKED TO THE CASE AND AND THE WATER SOURCES THAT THE CASES ARE CURRENTLY USING, DAILY VISITS AND EARLY MORNING CASE SEARCH IN ALL THE VILLAGES/ GARDENS IN POONGO II CLUSTER, MASS DISTRIBUTION OF FILTERS IN THE ENTIRE ENDEMIC CLUSTER AND STRICTER WATER PATROLLING, VISITED THE GARDEN PLOTS AND GARDEN WATER SOURCES POTENTIALLY USED BY THE PATIENT AND THEY ARE ALSO TARGETED, NOTIFIED TA JULIE IN POONGO I AND EMILIA IN MOGOS SOUTH TO HEIGHTEN SURVEILLANCE AMONG THE NANYANGDEET MOVING GROUPS IN THEIR AREA.	22-Apr	GUINEA WORM
3.2								3/Apr/14	YES										30-Apr	GUINEA WORM
3.3								26/Apr/14	YES										22-May	GUINEA WORM
3.4								14/May/14	YES										22-May	GUINEA WORM
4.1	LOCHAPIO		2	KAUTO	KAPOETA EAST	6	M	6/Apr/14	YES		2	LOCHAPIO		2	YES	NAWAYAPETA GARDENS OR LAPALAP (CC WHICH BORDERS THE NAWAYAPETA ENDEMIC CLUSTER)	YES	PART OF NAWAYAPETA ENDEMIC CLUSTER (7 CASES 2013); BOTH CC AND GARDEN AREAS BEING TREATED WITH ABATE AND SUBJECTED TO REGULAR CASE SEARCHES	30-Apr	GUINEA WORM
5.1	LOKUTA		2	KAUTO	KAPOETA EAST	12	F	19/Apr/14	YES		1	LOKUTA		2	YES	NAWOYAPAK GARDENS	YES	1 OTHER INDIGENOUS CASE IN NAWOYAPAK IN 2014	30-Apr	GUINEA WORM
5.2								29/Apr/14	YES										22-May	GUINEA WORM
5.3								30/Apr/14	YES										22-May	GUINEA WORM
6.1	NAWOYAPAK		2	KAUTO	KAPOETA EAST	10	M	5/Apr/14	YES		2	NAWOYAPAK		2	YES	NAWOYAPAK GARDENS	YES	PART OF NAWOYAPAK ENDEMIC CLUSTER (1 INDIGENOUS CASE 2014)	22-May	GUINEA WORM
7.1	LOCHAPIO		2	KAUTO	KAPOETA EAST	22	F	11/Apr/14	NO	9-Apr-14	2	LOCHAPIO		2	YES	NAWAYAPETA GARDENS OR LAPALAP (CC WHICH BORDERS THE NAWAYAPETA ENDEMIC CLUSTER)	YES	PART OF NAWAYAPETA ENDEMIC CLUSTER (7 CASES 2013); BOTH CC AND GARDEN AREAS BEING TREATED WITH ABATE AND SUBJECTED TO REGULAR CASE SEARCHES	23-Jun	GUINEA WORM
8.1	KATIANYAUNG-AGLICHAIT-MARIAMAPEM CC		2	KAUTO	KAPOETA EAST	25	F	10/May/14	NO	12-May-14	1	CHUMAKORO		2	YES	NATIKIPI OR LOKORIWON CC	NO		5-Jun	GUINEA WORM
8.2	NARENGEWI		2	KAUTO	KAPOETA EAST			8/Jul/14	NO	12-May-14									3-Aug	
9.1	LOCHAPIO		2	KAUTO	KAPOETA EAST	5	M	19-May-14	YES		2	LOCHAPIO		2	YES	NAWAYAPETA GARDENS OR LAPALAP (CC WHICH BORDERS THE NAWAYAPETA ENDEMIC CLUSTER)	YES	PART OF NAWAYAPETA ENDEMIC CLUSTER (7 CASES 2013); BOTH CC AND GARDEN AREAS BEING TREATED WITH ABATE AND SUBJECTED TO REGULAR CASE SEARCHES	13-Jun	GUINEA WORM
9.2								2-Jun-14	YES										13-Jun	GUINEA WORM
10.1	LOCHAPIO		2	KAUTO	KAPOETA EAST	6	M	20-May-14	YES		2	LOCHAPIO		2	YES	NAWAYAPETA GARDENS OR LAPALAP (CC WHICH BORDERS THE NAWAYAPETA ENDEMIC CLUSTER)	YES	PART OF NAWAYAPETA ENDEMIC CLUSTER (7 CASES 2013); BOTH CC AND GARDEN AREAS BEING TREATED WITH ABATE AND SUBJECTED TO REGULAR CASE SEARCHES	2-Jul	GUINEA WORM

Case #	Village or Locality of Detection			Payam	County	Age	Sex	Date GW Emerged	Case Contained?		1 = Imported 2 = Indigenous	Home Village or Locality			Presumed Source of Infection Identified?		Presumed Source of Infection is a Known EVA?		Worm Specimen	
	Name	1 = EVAS	2 = NEVAS						(Yes, No, or Pending)	If No, Date of Abate Rx*		Name	1 = EVAS	2 = NEVAS	(Yes / No)	Description	(Yes / No)	Actions?	Date sent to CDC	Diagnosis
11.1	LOCHAPIO		2	KAUTO	KAPOETA EAST	18	M	23/May/14	YES		2	LOCHAPIO		2	YES	NAWAYAPETA GARDENS OR LAPALAP (CC WHICH BORDERS THE NAWAYAPETA ENDEMIC CLUSTER)	YES	PART OF NAWAYAPETA ENDEMIC CLUSTER (7 CASES 2013); BOTH CC AND GARDEN AREAS BEING TREATED WITH ABATE AND SUBJECTED TO REGULAR CASE SEARCHES	7-Jul	GUINEA WORM
12.1	LORIWO	1		JIE	KAPOETA EAST	28	M	30/May/14	NO	2-Jun-14	2	LORIWO	1		YES	GRAZING AREAS AROUND LORIWO VILLAGE	YES		13-Jun	GUINEA WORM
12.2								14/Jun/14	NO	2-Jun-14									1-Jul	GUINEA WORM
13.1	NAKITIRIOK CC		2	KAUTO	KAPOETA EAST	15	M	1/Jun/14	YES		1	LOWI		2	YES	NAWAYAPETA GARDENS OR LAPALAP (CC WHICH BORDERS THE NAWAYAPETA ENDEMIC CLUSTER)	YES	PART OF NAWAYAPETA ENDEMIC CLUSTER (7 CASES 2013); BOTH CC AND GARDEN AREAS BEING TREATED WITH ABATE AND SUBJECTED TO REGULAR CASE SEARCHES	13-Jun	GUINEA WORM
14.1	DOCHA	1		JIE	KAPOETA EAST	30	M	2-Jun-14	YES		2	DOCHA	1		YES	NALIAMOJONG CC/GRAZING AREA	YES	CONTINUED TARGETING OF ALL WATER SOURCES	12-Jul	GUINEA WORM
15.1	LOCHAPIO		2	KAUTO	KAPOETA EAST	13	M	6-Jun-14	YES		2	LOCHAPIO		2	YES	NAWAYAPETA GARDENS OR LAPALAP (CC WHICH BORDERS THE NAWAYAPETA ENDEMIC CLUSTER)	YES	PART OF NAWAYAPETA ENDEMIC CLUSTER (7 CASES 2013); BOTH CC AND GARDEN AREAS BEING TREATED WITH ABATE AND SUBJECTED TO REGULAR CASE SEARCHES	23-Jun	GUINEA WORM
16.1	TELEMABOYO		2	NARUS	KAPOETA EAST	32	M	10-Jun-14	YES		1	TELEMABOYO		2	YES	NABWELANGAKINEI-NAWAYAPETA ENDEMIC CLUSTER	YES	ACTIVE CASE SEARCH WITHIN HOME AREA AND THE AREAS HE VISITED IN KAUTO	23-Jun	GUINEA WORM
16.2								11-Jun-14	YES										23-Jun	GUINEA WORM
17.1	ITIBO		2	KAUTO	KAPOETA EAST	12	F	17-Jun-14	YES		1	ITIBO		2	YES	NATIKIPI OR LOKORIWON CC	NO	ACTIVE CASE SEARCHES AMONG THEIR MOVING GROUP AND KNOW TRAVEL PARTNERS	1-Jul	GUINEA WORM
18.1	DAK BUONG		2	ABUYONG	AWERIAL	31	F	21-Jun-14	YES		2	WUNKUM	1		YES	WUNKUM/DAK BUONG	YES	DAK BUONG AND WUNKUM VILLAGES ARE CONNECTED AND SHARE THE SAME WATER SOURCES; BOTH ARE BEING TARGETED FOR ABATE	12-Jul	GUINEA WORM
19.1	NGISIGAR		2	MACHI I	KAPOETA SOUTH	16	M	28-Jun-14	NO	2-Jul-14	1	NGISIGAR		2	YES	NABWELANGAKINEI-NAWAYAPETA ENDEMIC CLUSTER	YES	ACTIVE CASE SEARCHES AMONG TRAVEL PARTNERS AND FAMILY	1-Jul	GUINEA WORM
20.1	DAK BUONG		2	ABUYONG	AWERIAL	4	F	16-Jul-14	YES		2	DAK BUONG		2	YES	WUNKUM/DAK BUONG	YES	DAK BUONG AND WUNKUM VILLAGES ARE CONNECTED AND SHARE THE SAME WATER SOURCES; BOTH ARE BEING TARGETED FOR ABATE	3-Aug	
21.1	DAK BUONG		2	ABUYONG	AWERIAL	50	F	16-Jul-14	YES		2	DAK BUONG		2	YES	WUNKUM/DAK BUONG	YES	DAK BUONG AND WUNKUM VILLAGES ARE CONNECTED AND SHARE THE SAME WATER SOURCES; BOTH ARE BEING TARGETED FOR ABATE		
22.1	NATITIA		2	NARUS	KAPOETA EAST	19	M	19-Jul-14	YES		1	NATITIA		2	NO	STILL UNDER INVESTIGATION				
23.1	DAK BUONG		2	ABUYONG	AWERIAL	5	M	21-Jul-14	YES		2	DAK BUONG		2	YES	WUNKUM/DAK BUONG	YES	DAK BUONG AND WUNKUM VILLAGES ARE CONNECTED AND SHARE THE SAME WATER SOURCES; BOTH ARE BEING TARGETED FOR ABATE		
24.1	LOPASMoe		2	KAUTO	KAPOETA EAST	25	M	21-Jul-14	YES		1	LOPASMoe		2	NO	STILL UNDER INVESTIGATION				
25.1	MINKAMAN		2	PULUK	AWERIAL	24	F	22-Jul-14	NO	24-Jul-14	1	PANAKECH		2	NO	STILL UNDER INVESTIGATION, LIKELY IMPORTED FROM JARWENG BOMA				
26.1	NASUWATKOU		2	KAUTO	KAPOETA EAST	25	F	23-Jul-14	NO	25-Jul-14	1	NASUWATKOU		2	NO	STILL UNDER INVESTIGATION				
27.1	NASUWATKOU		2	KAUTO	KAPOETA EAST	20	F	23-Jul-14	NO	25-Jul-14	1	NASUWATKOU		2	NO	STILL UNDER INVESTIGATION				
28.1	NGIRO		2	KAUTO	KAPOETA EAST	18	F	26-Jul-14	YES		2	NGIRO		2	YES	NGIRO GARDENS WHICH IS LOCATED IN POONGO I ENDEMIC CLUSTER OR CATTLE CAMPS IN KAUTO EAST OR NAKIPINAKWAAK	YES	FREQUENT CASE SEARCHES IN NGIRO AND SURROUNDING VILLAGES. ALL WATER SOURCES USED BY LOBOKONYA COMMUNITY IS TARGETED AND TREATED WITH ABATE		

Case #	Village or Locality of Detection			Payam	County	Age	Sex	Date GW Emerged	Case Contained?		1 = Imported 2 = Indigenous	Home Village or Locality			Presumed Source of Infection Identified?		Presumed Source of Infection is a Known EVA?		Worm Specimen		
	Name	1 = EVAS	2 = NEVAS						(Yes, No, or Pending)	If No, Date of Abate Rx*		Name	1 = EVAS	2 = NEVAS	(Yes / No)	Description	(Yes / No)	Actions?	Date sent to CDC	Diagnosis	
29.1	NASUWATKOU		2	KAUTO	KAPOETA EAST	45	F	28-Jul-14	YES		2	NASUWATKOU		2	NO	STILL UNDER INVESTIGATION					
30.1	KORICHUPA		2	KAUTO	KAPOETA EAST	22	F	27-Jul-14	YES		1	KORICHUPA		2	NO	STILL UNDER INVESTIGATION PRESUMABLY FROM NAKOLIO CATTLE CAMP, KILIRI CATTLE CAMP OR NASUWATKOU VILLAGE					
31.1	NAOYAGULE	1		JIE	KAPOETA EAST	13	M	29-Jul-14	YES		2	NAOYAGULE	1		YES	GRAZING AREAS AROUND KASSINGOR CATTLE CAMP ENDEMIC CLUSTER	YES	INTERVENTIONS ARE BEING PUT IN PLACE IN THE VILLAGES AND SURROUNDING CATTLE CAMPS/ GRAZING AREAS. ALL WATER SOURCES ARE ABATED AND EVERY HOUSEHOLD HAVE FILTERS. WE ARE ALSO PRIORITISING FINDING SUSPECTS AND CHECKING WATER SOURCES FOR FILTER USE COMPLAINE			
32.1	LORIWO	1		JIE	KAPOETA EAST	27	F	29-Jul-14	YES		2	LORIWO	1		YES	GRAZING AREAS AROUND KASSINGOR CATTLE CAMP ENDEMIC CLUSTER	YES	INTERVENTIONS ARE BEING PUT IN PLACE IN THE VILLAGES AND SURROUNDING CATTLE CAMPS/ GRAZING AREAS. ALL WATER SOURCES ARE ABATED AND EVERY HOUSEHOLD HAVE FILTERS. WE ARE ALSO PRIORITISING FINDING SUSPECTS AND CHECKING WATER SOURCES FOR FILTER USE COMPLAINE			
33.1	PARPAR		2	KAUTO	KAPOETA EAST	10	M	29-Jul-14	YES		1	NASUWATKOU		2	NO	STILL UNDER INVESTIGATION					
34.1	NASUWATKOU		2	KAUTO	KAPOETA EAST	12	M	25-Jul-14	NO	23-31 /7/2014	2	NASUWATKOU		2	NO	STILL UNDER INVESTIGATION					
35.1	LOTUKOMOE		2	KAUTO	KAPOETA EAST	20	M	27-Jul	NO	31-Jul-14	2	LOTUKOMOE		2	NO	STILL UNDER INVESTIGATION					
36.1	KUDULE		2	LOKWAMOR	KAPOETA NORTH	14	F	23-Jul-14	NO	31-Jul-14	2	KUDULE		2	NO	STILL UNDER INVESTIGATION					
37.1	DAK BUONG		2	ABUYONG	AWERIAL	14	F	27-Jul-14	YES		2	DAK BUONG		2	YES	WUNKUM/DAK BUONG	YES	DAK BUONG AND WUNKUM VILLAGES ARE CONNECTED AND SHARE THE SAME WATER SOURCES; BOTH ARE BEING TARGETED FOR ABATE			
3-Aug-14								YES													
38.1	WUNKUM	1		ABUYONG	AWERIAL	8	F	28-Jul-14	YES		2	WUNKUM	1		YES	WUNKUM/DAK BUONG	YES	DAK BUONG AND WUNKUM VILLAGES ARE CONNECTED AND SHARE THE SAME WATER SOURCES; BOTH ARE BEING TARGETED FOR ABATE			
39.1	NASUWATKOU		2	KAUTO	KAPOETA EAST	26	M	28-Jul-14	YES		2	NASUWATKOU		2	NO	STILL UNDER INVESTIGATION					
40.1	NASUWATKOU		2	KAUTO	KAPOETA EAST	30	F	28-Jul-14	YES		2	NASUWATKOU		2	NO	STILL UNDER INVESTIGATION					
41.1	NASUWATKOU		2	KAUTO	KAPOETA EAST	30	F	28-Jul-14	YES		2	NASUWATKOU		2	NO	STILL UNDER INVESTIGATION					

EVS= Endemic Villages

NEVS = Non Endemic Villages

Gardens = Farming areas of villages

CC = Cattle Camp

CCC = Case Containment Center

and National Program Manager of the SSGWEP Mr. Samuel Yibi Makoy, personally launched the SSGWEP's cash reward (500 South Sudanese Pounds ~US\$125 for persons self-reporting with a case of Guinea worm disease if the case is contained; if the case is detected and reported by an informant, both the patient and the informant receive one half of the award), by visiting several endemic villages during a ten day tour of Jie, Mogos, Narus, Kauto and Lotimor Payams of Kapoeta East County. The cash reward system was rolled out in other areas of South Sudan in April and May. Dr. Itto paid the first recipient of the cash reward during a big community award ceremony in Kauto Payam. On June 14 the SSGWEP held a one-day workshop to educate 20 local journalists about the program.

United States Ambassador to South Sudan the Honorable Susan Page visited the SSGWEP compound in Kuron North (Kapoeta East County) on June 4, accompanied by Emeritus Bishop Paride Taban. Ambassador Page spoke to the entire team of Field Officers, Program Officers and Technical Advisors for the two Kuron sub-offices during her visit and congratulated them on the progress of the eradication program. The team presented the ambassador with a ceremonial beaded pipe filter.

CHAD: COMBATING PECULIAR EPIDEMIOLOGY

In January-July 2014, Chad's GWEP has reported 8 cases of Guinea worm disease (Table 3), of which 5 were contained (63%), compared to 8 cases reported during the same period of 2014, which is a 0% change in cases so far this year. Six of the 8 cases are females (age range 9-52). A total of 89 dogs in Chad have had Guinea worms emerge during January-July, compared to 37 infected dogs detected during the same period in 2013 (Figure 4). The last three human cases (1 in June and 2 in July) were detected in villages in Kyabe and Sarh Districts of Moyen Chari Region, which are zones under passive surveillance. The June patient, a 13 year old female whose worm began to emerge on June 30, did not know of the reward. She was brought by her father to a health center on July 4, and thus was not contained, although she reportedly did not contaminate any water source because of her incapacity and the availability of safe sources of drinking water in her community. The two July cases (one contained) were each detected in different villages, one in Kyabe and the other in Sarh District. Despite the urgency about eradication of GWD in Chad, there is a low level of awareness about GWD and rewards in these districts. Of the three human cases that occurred in June-July in Kyabe and Sarh Districts only one was detected and investigated rapidly enough to result in containment.

Chad's GWEP has 682 villages under active surveillance (VAS) in 2014. The status of interventions in 72 VAS reporting human cases of GWD and or dogs with GW is summarized in Figure 5. The GWEP and The Carter Center have continued to promote standard practices of active surveillance, case containment, health education, use of ABATE® Larvicide in all appropriate water sources contaminated by humans and/or dogs, cloth filters where appropriate, and awareness of the cash reward for reporting a case of the disease. These measures were augmented beginning in October 2013 to educate residents about proper cooking of fish, and about the need to not allow dogs to eat raw fish or fish entrails.

Dr. Ernesto Ruiz-Tiben made an oversight visit to Chad's GWEP on June 2-8, when he met with the national program coordinator Dr. Mahamat Tahir Ali, other ministry of health leaders, Carter Center

in-country staff, and representatives of WHO. He stressed that the GWEP should be the lead and the umbrella for all GW activities, and he encouraged the GWEP to formally create a GW Eradication Task Force to meet monthly and coordinate all GW activities. During a visit on July 5-16, Dr. Ruiz and Dr. Mark Eberhard (recently retired from CD) and a GWEP team, including Mr. Tchoufiniet Mounday, Assistant National GWEP Coordinator, Ms. Corey Farrell, Carter Center County Representative, Carter Center Technical Advisors Ms. Ariane Ngo, and Karmen Unterwegner, and various GWEP supervisors, assessed the effectiveness of ABATE treatments implemented by using a fine cloth barrier to cordon off contaminated entry points along the borders of lagoons and oxbows that are too large to treat conventionally. They concluded that the cloth barrier, as designed and deployed during their testing, allowed the effective use of Abate in those settings.

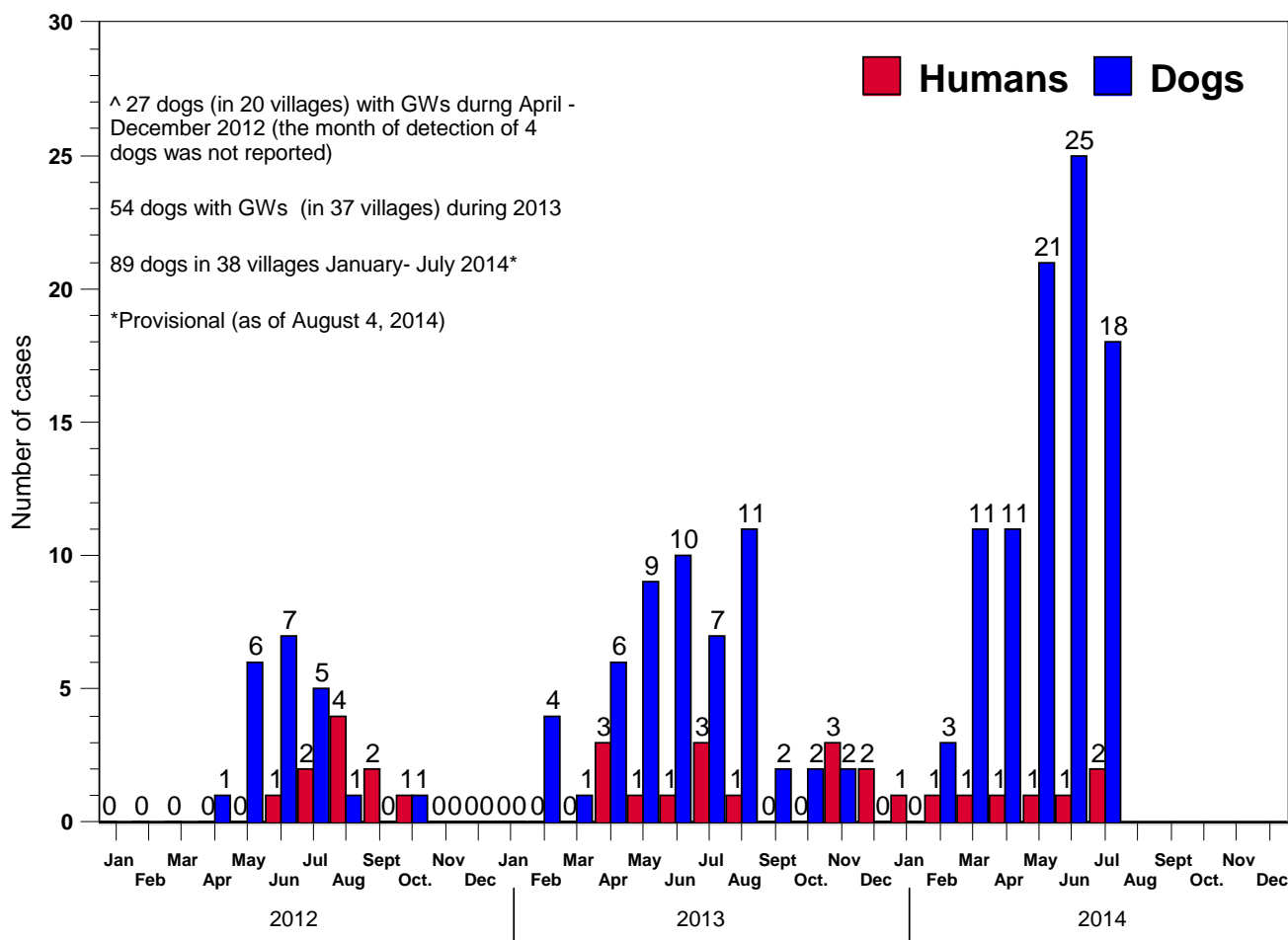


In response to a request from the Chad GWEP, UNICEF/Chad provided 23 boreholes, one each to 23 at-risk villages under active surveillance without a safe source of drinking water in 5 districts. This project began in March and was completed in June. These additional boreholes increased the proportion of 72 priority villages with one or more sources of water from 52% at the beginning of 2014 to 72%, (Figure 5). Discussions are ongoing to provide additional boreholes

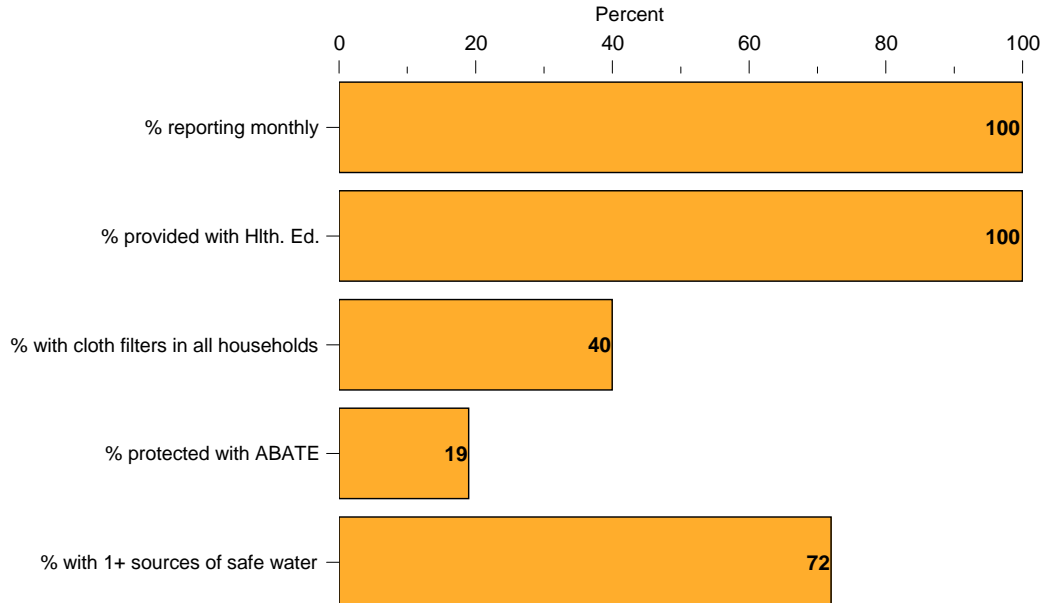
in other Guinea worm at-risk communities.

Figure 4

**Chad Guinea Worm Eradication Program
Reported Cases of Draccunculiasis Among Humans and Dogs by Month during 2012[^]-2014***



Status of Intervention Indicators in 72 Priority Villages during 2013-2014



ETHIOPIA: SECOND OLDEST GWEP STILL ON-GOING

Ethiopia, which began its Ethiopia Dracunculiasis Eradication Program (EDEP) in 1994 with 1,252 cases of the disease reported that year, has reported 2 cases in June 2014 and zero cases in July, after 11 consecutive months with zero cases reported. Both of the cases were contained, and are at the Case Containment Center in Pugnido (Table 4). Worm specimens from both patients have been sent to CDC for examination. One of the cases was a 65 year old male who was detected in Gambella Town; the other was a 12 year old male detected in Wichini village in Gog district. The source of both cases is alleged to be Wichini, but the most recent known case of GWD in that village was in 2010. Wichini Village has safe sources of drinking water. Ethiopia has 173 villages under active surveillance in Gambella Region: all of Gog district (72 villages), all of Abobo (79), and 22 villages in Itang. Ethiopia reported 7 cases in January-July 2013, so this is a reduction in cases of 71%.

MALI: OLDEST GWEP STILL ON-GOING

Mali, which began its GWEP in 1993 with 12,011 cases, reported 4 cases, one of which was contained, in January-July 2013 and has reported no cases in January-July 2014. The peak season for transmission of GWD in Mali is July-December. In 2013 Mali had 1 uncontained case in Mopti Region in May, 2 uncontained cases in Kidal Region in May, and 1 uncontained case in Gao Region in October (Table 6). This program has 85 villages under active surveillance. The NGOs *Medecin du Monde (Belgium)* and Norwegian Church Aid are helping the program conduct some surveillance in the region of Kidal, where a Malian technical assistant supported by The Carter Center has limited access to some communities in and around the town of Kidal. National program coordinator Dr. Gabriel Guindo led a team in visits to Segou, Mopti, Gao and Timbuktu Regions from April 22 to

Table 3

**Chad Guinea Worm Eradication Program
Line Listing of Cases of GWD during 2014**

Case #	Village or Locality of detection				Payam or District or Woreda	County or Region	Patient			Case Contained?		1 = imported 2 = indigenous	Home Village or Locality			Presumed Source of infection identified?		Presumed Source of infection is a known EVA?		
	Name	1 = EVAS	2 = NEVAS	3 = PSV			Age	Sex	Date GW emerged (D/M/Y)	(Yes, No, or Pending)	If no, date of Abate Rx		Name	1 = EVAS	2 = NEVAS	3 = PSV	(Yes or No)	Name	(Yes or No)	Actions?
1	Maimou			3	Sarh	Moyen Chari	9	F	18-Jan-14	yes		2	Maimou			3	No			
2	Yadime			3	Bouso	Chari Baguirmi	52	F	14-Feb-14	yes		2	Yadime			3	Yes	Lelgoui pond	no too large	
3	Nanguigoto		2		Guelendeng	Mayo Kebbi Est	11	F	7-Mar-14	yes		2	Nanguigoto		2		Yes	toyobo-Dignanali villae	no too large	
4	Bongor			3	Bongor	Mayo Kebbi Est	11	M	12-Apr-14	yes		1	Guelendeng			3	No	Madjoue, Martawa, Chari river	no sources not confirmed	
5	Kalam Kalam			3	Mandelia	Chari Baguirmi	40	M	9-May-14	no	no contamination	1	Koundoul			3	No		no	
6	Massa Kaba			3	Kyabe	Moyen Chari	13	F	30-Jun-14	no	no contamination	2	Massa Kaba			3	No		no	
7	Moudjououssou			3	Kyabe	Moyen Chari	22	F	15-Jul-14	no	river	2	Moudjououssou			3	No		no	
8	Kirah			3	Sarh	Moyen Chari	30	F	18-Jul-14	yes		2	Kirah			3	No		no	

EVAS = endemic village under active surveillance

NEVAS = non endemic village under active surveillance

Table 4

**Ethiopia Guinea Worm Eradication Program
Line Listing of Cases during 2014**

Case #	Village or Locality of detection				Payam or District or Woreda	County or Region	Patient			Case Contained?		1 = imported 2 = indigenous	Home Village or Locality			Presumed Source of infection		Presumed Source of infection is a known EVA?		
	Name	1 = EVAS	2 = NEVAS	3 = PSV			Age	Sex	Date GW emerged (D/M/Y)	(Yes, No, or Pending)	If no, date of Abate Rx		Name	1 = EVAS	2 = NEVAS	3 = PSV	(Yes or No)	Name	(Yes or No)	Actions?
1.1	Gambella Town			3	Gambella	Gambella	65	M	12-Jun-14	Yes		1	Wichini		2		No		Ponds Rx ABATE	
2.1	Wichini		2		Gog	Gambella	12	M	22-Jun-14	Yes		2	Wichini		2		No		Ponds Rx ABATE	

EVAS = endemic village under active surveillance

NEVAS = non endemic village under active surveillance

May 2. Dr. Guindo visited Mopti again later in May, and led a team in visits to Mopti, to Gao and Ansongo districts (Gao Region) and Gossi district (Timbuktu Region) from 17 to 25 June.

IN BRIEF:

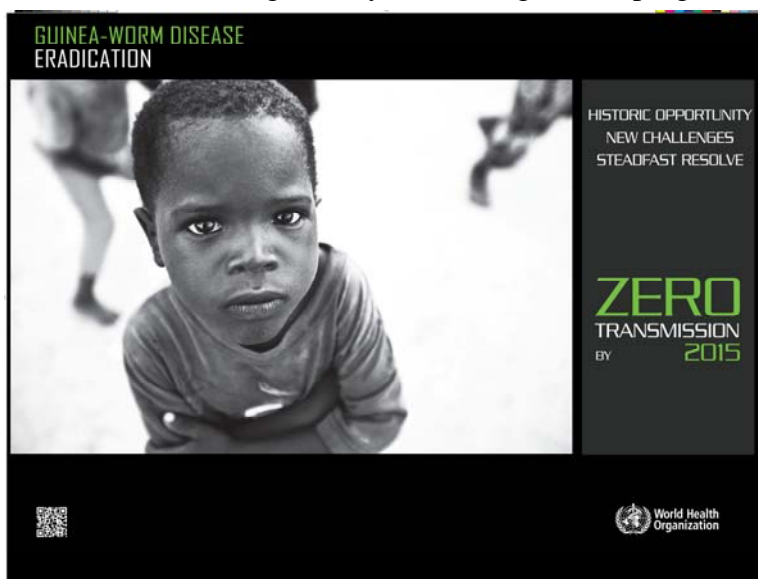
Sudan's GWEP is conducting active surveillance and interventions in the village of Kafia-Kingi where three cases were discovered in 2013, and in four nearby villages at risk. Trained village volunteers conduct health education and house-to-house searches for cases twice a month, distribute cloth and pipe filters, and apply Abate monthly in all five villages. Two of the villages have a source of safe drinking water. All residents of the five villages are said to be aware of the cash reward for reporting a case of GWD, but no systematic survey has been conducted. The program investigated 52 rumors of cases in June. No case has been reported in January-July 2014, although two cases, both contained, were reported in June 2013.

INFORMAL MEETING DURING WORLD HEALTH ASSEMBLY DRAWS RECORD CROWD



World Health Organization

A record number of participants at the annual Informal Meeting on Dracunculiasis Eradication that met on the evening of May 21 during this year's World Health Assembly in Geneva included WHO Director-General Dr. Margaret Chan, WHO Regional Director for Africa Dr. Luis Sambo, the Ministers of Health of Ethiopia, Mali, Nigeria, Niger, Ghana, Kenya and Pakistan, the Undersecretary in the national Ministry of Health and the State Minister of Health for Eastern Equatoria State of South Sudan, and the Secretary of State in the Ministry of Health of Chad. Other participants included representatives of The Carter Center, the Bill & Melinda Gates Foundation, and Vestergaard Frandsen. A video message from former U.S. President Jimmy Carter was shown at the beginning of the meeting. The main message by President Carter and Drs. Chan and Sambo at the meeting was that the ministers of health of the four remaining endemic countries should actively support their Guinea Worm Eradication Programs by advocating for the program and by personally visiting an endemic village.



A highly popular poster outside of the official setting in Room XXII at the Palais des Nations set the tone of the event as hundreds of participants during the World Health Assembly, including virtually everyone who attended the Informal Meeting on Guinea worm eradication (led by the director-general herself), paused to be photographed there. The poster portrays a child seemingly anticipating the demise of Guinea worm disease with the message: "Zero transmission in 2015".

VESTERGAARD EXTENDS DONATION OF FILTERS



The Carter Center is pleased to announce an extension of Vestergaard's continued commitment to the eradication of Guinea worm disease with the donation of LifeStraw Guinea Worm pipe filters and cloth filters for another two years, 2015 and 2016. The value of this latest in-kind donation, US\$365,900, is in addition to the company's previous donations of over \$1 million to The Carter Center. The donation provides all of the LifeStraw pipe filters and cloth filters estimated to be needed to the end of the Guinea worm eradication campaign.

TRANSITIONS

- After 25 years of distinguished service as the Focal Point for Guinea Worm Eradication for the African Regional Office of the World Health Organization, **Dr. Alhousseini Maiga** retired to his home in Mali at the end of June. He was bid fond farewells during the annual meeting of National Program Managers in Addis Ababa in March and during the Informal Meeting in Geneva in May. You still have work to do in Mali, Alhous!
- **Mr. David Stobbelaar** resigned his position as Country Representative of The Carter Center in South Sudan as of the end of June after dedicated service to the South Sudan Guinea Worm Eradication Program beginning in 2008 as a technical advisor, deputy country representative, and since 2005, Country Representative. He assumed the position of chief operation officer for The Carter Center's activities in Liberia. The Minister of Health of South Sudan gave the keynote speech at a farewell banquet held in David's honor in Juba on June 24. Thank you and Godspeed David!
- **Ms. Jessica Flannery** left the Guinea Worm Eradication unit at Carter Center headquarters early in June to enroll in a doctoral program at the School of Public Health of Harvard University. Thank you and study hard, Jessica!
- **Dr. Mark Eberhard** retired from CDC on May 31 after 28 years, most recently as a research microbiologist in the Division of Parasitic Diseases and Malaria. Mark was director of the Division of Parasitic Diseases from 2003 to 2012, and was named a member of the International Commission for the Certification of Dracunculiasis Eradication last year—a position in which he will continue to serve. Congratulations Mark!

RECENT PUBLICATIONS

World Health Organization, 2014. Dracunculiasis eradication-global surveillance summary, 2013. Wkly Epidemiol Rec 89:189-203.

World Health Organization, 2014. Monthly report on dracunculiasis cases, January-April 2014. Wkly Epidemiol Rec 89:203-204.

Thanks to an in-kind donation, The Carter Center has published its first smartphone app. Guinea Worm: Countdown to Zero allows users to track the progress of the Center's Guinea Worm Eradication Program. The app is available for Android phones via the Google Play store using the below link. At this point the app is not available on the iPhone platform.

<https://play.google.com/store/apps/details?id=com.thecartercenter.android.countdowntozero&hl=en>

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, Dr. Sharon Roy of CDC and Dr. Mark Eberhard.

WHO Collaborating Center for Research, Training, and Eradication of Dracunculiasis, Center for Global Health, Centers for Disease Control and Prevention, Mailstop C-09, 1600 Clifton Road NE, Atlanta, GA 30333, USA, email: gwwrapup@cdc.gov, fax: 404-728-8040. The GW Wrap-Up web location is <http://www.cdc.gov/parasites/guineaworm/publications.html#gwwp>

Back issues are also available on the Carter Center web site English and French are located at http://www.cartercenter.org/news/publications/health/guinea_worm_wrapup_english.html.
http://www.cartercenter.org/news/publications/health/guinea_worm_wrapup_francais.html



**World Health
Organization**

CDC is the WHO Collaborating Center for Research, Training, and Eradication of Dracunculiasis.