Memorandum



Date: September 22, 2015

From: WHO Collaborating Center for isional total number of cases of Guinea worm disease r globally in January-August 2015 was only 15, which is an 80% reduction from the 75 ca were reported during the same eight months of 2014 (Figure 1). This dramatic reductio by South Sudan, which slashed its cases by 95% in that period. Although South Sudan has of its cases last year in July and August (43 of 70 total cases), Mali, which had the shighest total cases in 2014 (40), had its peak number of cases (39) in September-No (Table 1). The low overall containment rate (36%) so far this year is mainly because neighbor as a case in Chad nor the single case in Mali were contained; South Sudan contained 2 cases and Ethiopia contained both of its cases.

Figure 1

REPORTED CASES OF DRACUNCULIASIS BY COUNTRY
DURING JANUARY - AUGUST 2014 and 2015\*

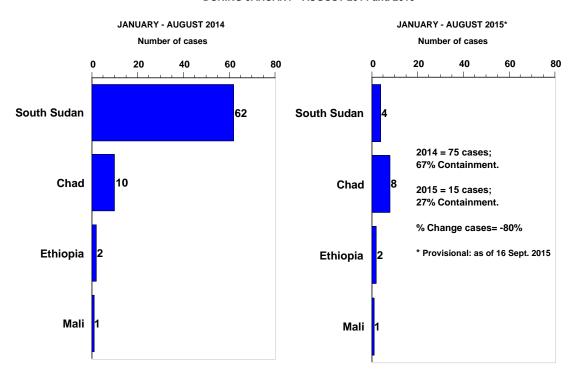


Table 1

# Number of Reported Cases of Guinea Worm Disease Contained and Number Reported by Month during 2015\*

(Countries arranged in descending order of cases in 2014)

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*											CONT.		
SOUTH SUDAN	0/0	0 / 0	0/0	0/0	0/0	1/1	1/2	0/1	/	/	/	/	2/4	50
MALI <sup>§</sup>	0/0	0/0	0/0	0/0	0/0	0/0	0/1	0/0	/	/	/	/	0/1	0
CHAD	0/0	0/1	0/2	0/1	0/0	0/2	0/1	0/1	/	/	/	/	0/8	0
ETHIOPIA	0/0	0/0	0/0	0/0	1/1	0/0	0/0	1/1	/	/	/	/	2/2	100
TOTAL*	0/0	0/1	0/2	0/1	1/1	1/3	1/4	1/3	0 / 0	0/0	0/0	0/0	4 / 15	27
% CONTAINED	0	0	0	0	100	33	25	33					27	

#### \*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.

# 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	NUMBER OF CASES CONTAINED / NUMBER OF CASES REPORTED													% CONT.
TRANSMISSION	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL*	CONT.
SOUTH SUDAN	0/0	0/0	3/3	3/4	3/4	6/8	13 / 22	14 / 21	4/5	1/3	0/0	0/0	47 / 70	67
CHAD	1/1	1/1	1/1	1/1	0/1	0/1	1/3	0/1	1/1	0/0	1/1	1/1	8 / 13	62
MALI <sup>§</sup>	0/0	0/0	0/0	0/0	0/0	0/0	0/0	1/1	14 / 18	12 / 13	8/8	0/0	35 / 40	88
ETHIOPIA	0/0	0/0	0/0	0/0	0/0	2/2	0/0	0/0	0/0	0/0	0/0	0/1	2/3	67
TOTAL*	1/1	1/1	4/4	4/5	3/5	8 / 11	14 / 25	15 / 23	19 / 24	13 / 16	9/9	1/2	92 / 126	73
% CONTAINED	100	100	100	80	60	73	56	65	79	81	100	50	73	

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, Tinbuktu 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).

<sup>§</sup>Reports include Kayes, Koulikoro, Segou, Sikasso, and Mopti, Tinbuktu and Gao Regions; in late April. One technical advisor deployed to Kidal in April 2013 continues to overeee the program in that region.

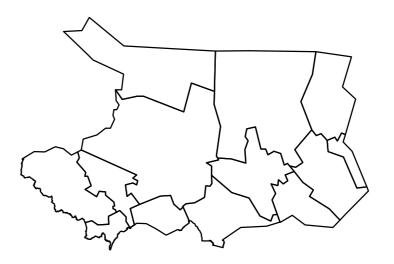


Table 2

	Name	1 = 2 = EVAS NEVAS						(Yes, No, or Pending)	If No, Date of Abate Rx*		Name	1 = 2 = EVAS NEVAS	(Yes / No)	Description	(Yes / No)	Actions?	Date Sent to CDC	Diagnosis	CDC Accession Number
1.1	DAKBUONG	1	ABUYONG	AWERIAL	5	F	22 Jun 15	YES		2	DAKBUONG	4	YES	PATIENT WAS A CASE OF GWD DAKBUONG VILLAGE IN 2014. LIKELY INFECTED IN DAKBUONG IN 2014	YES		1 Jul 15	GUINEA WORM	PDB15 155
2.1	LORIWO	1	ЛЕ	KAPOETA EAST	25	М	11 Jul 15	YES		2	LORIWO	5	YES	LIKELY INFECTED IN LOZUDOK OR KASSINGOR MOUNTAIN JIE VILLAGES IN 2014	YES		7 Jul 15	GUINEA WORM	PDB15 164
3.1							26 Jul 15										12 Aug 15	GUINEA WORM	PDB15 167
3.2							25 Aug 15		28/Aug/15										
4.1							26 Aug 15										9 Sep 15	GUINEA WORM	PDB15 181

10 Sep 15

EVAS = endemic villages under active surveillance NEVS = Non Endemic Villages

4.2

May). There are no other dogs reported to have emerging worms at this time or anytime previously. Specimens from both of these latter infections are being sent to the Centers for Disease Control and Prevention (CDC) for laboratory examination. The surface water sources associated with the latest cases were or are being treated with ABATE@ Larvicide applications. During 2015 UNICEF rehabilitated 10 non-functional water points and drilled 7 new borehole wells in the endemic Kassingor and Nanyangachor areas of Kapoeta East County. The location of villages reporting confirmed cases of GWD in 2014 and so far during 2015 are shown in Figure 3.

Interviews of persons from 1,066 households in areas under active surveillance in Kapoeta East County (Kauto Central, Kauto East, Lotimor) of Eastern Equatoria State in July 2015 found 922 (86%) of households knew of the cash reward, while 71% of 367 interviewees in Kauto West, which is also under active surveillance, knew of the reward. Kauto West reported that 86% of the 14 cases reported there in 2014 have been visited weekly so far in 2015. In the active surveillance areas of Lakes State, 11 (92%) of the 12 cases reported there in 2014 have been visited weekly so far in 2015 (the 12th patient was visited weekly for six months and monthly for two months). Kauto West reported 1,513 rumors of cases and Awerial and Wulu Counties of Lakes State reported 329 rumors of cases in January-July 2015. In Risk Level II (adjacent to currently endemic counties) and Risk Level III (never endemic & low importation risk) areas, the SSGWEP investigated 99% of 136 rumors received in January-May 2015, and 99% of 219 rumors received in June-August 2015; 89% of the 219 rumors were investigated within 24 hours.

### CHAD: COVERAGE WITH INTERVENTIONS INCREASES

Chad has reported an eighth case of GWD for the year, in a 54 year old woman whose worm began to emerge on August 17 and was not contained. This infection was discovered after the patient's 5 year old granddaughter recognized the emerging worm, and informed her older brother that their grandmother had a worm that might be Guinea worm. Her brother then informed the Guinea worm village volunteer supervisor about his grandmother's condition. Five of the 8 cases reported so far this year have

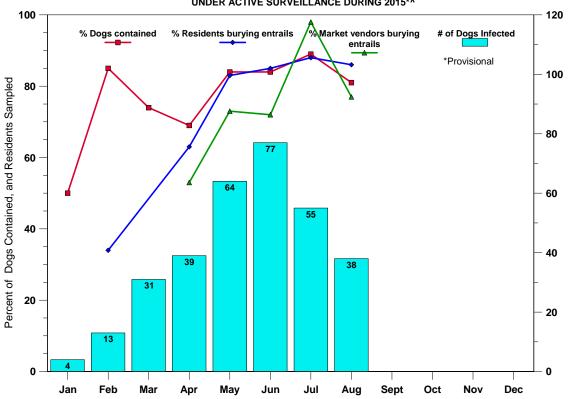
Table 3

VAS = village under active surveillance VNAS = village not under active surveillance

# CHAD GUINEA WORM ERADICATION PROGRAM LINE

Date GW Sex emerged (D/M/Y) 2.1 Marabe I 2 Kyabe Moyen Chari 8 7 Mar 15 No 2 Marabe I 2 No No Did not contaminate water 24 Mar 15 2.2 2.3 13 Apr 15 Guelendeng 3.1 Diganaly Mayo Kebi Est 9 Μ 28 Mar 15 No 6 Apr 15 2 Diganali No No 3.2 5 Apr 15 14 Apr 15 3.3 4.1 Maicomb 2 Moyen Chari 3 28 Apr 15 No 2 Maicomb 2 No No Danamaji 4.2 17 May 15 4.3 17 May 15 The boy drank water from a contaminated pond last year. The pond was contaminated by a dog in Ngargue (1km of Pandori where Pond 1km the boy resided for several months 2 of Pandki last year) 5.1 Mourabat Ba Illi Chari Baguirmi 14 M 24 Jun 15 No Mourabat 1 Yes Yes Although detected in Lai this case is linked to the one from Ba IIIi as they were together in the Ba IIIi area in 2014 and presumably drank water from the pond was contaminated by a dog in Ngargue (1km of Pandori where case #5 resided for several months last Logonne Pond 1km Ferick Tchaguine Occidental 18 26 Jun 15 Ferick Tchaguine 2 Yes Yes Tandjile M No of Pandki year) 7.1 Houa Ali 2 Am Timan Salamat 12 F 6 Jul 15 No 2 Goz-Arachidia 2 No No Boulama Bororo Mana Belegna 54 17 Aug 15 2 No No Massenya Chari Baguirmi No Centre

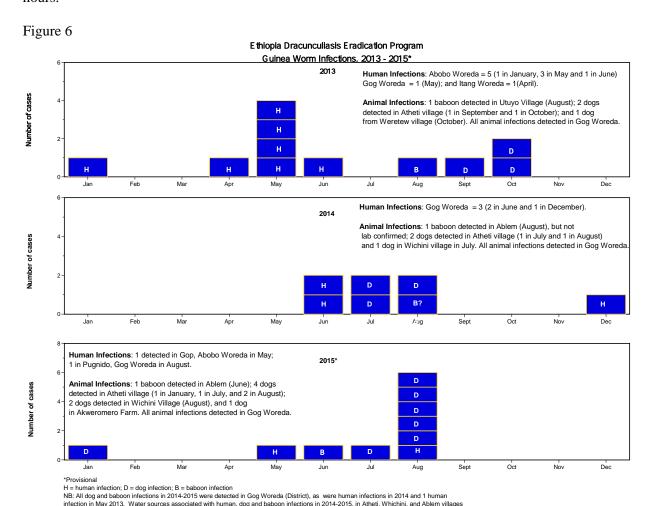
CHAD GUINEA WORM ERADICATION PROGRAM
PERCENTAGE BY MONTH OF INFECTED DOGS CONTAINED AND OF SAMPLED RESIDENTS AND MARKET
VENDORS BURYING FISH ENTRAILS, AND NUMBER OF DOGS INFECTED WITH GUINEA WORMS IN 816 VILLAGES
UNDER ACTIVE SURVEILLANCE DURING 2015\*^



### ETHIOPIA: 1 CASE IN A HUMAN AND 5 INFECTED DOGS IN AUGUST

The Ethiopian Dracunculiasis Eradication Program (EDEP) has reported its second case of GWD so far this year in a thirty year old male Agnuak farmer/hunter resident of PRC-Agnuak in Gog district of Gambella Region (Table 4). Four of the five infected dogs reported in August are resident in Atheti or Wichini villages, which are located across the road from each other in Gog district (Figure 7). The fifth infected dog lives in the Akweramero Farm area of Gog district. The 2 patients reported in August and May 2015 hunted together approximately one year ago along with two other men who are under observation but have not shown symptoms or signs of a GW infection. Both cases were contained and the presumed source of both patients' infections was ascertained (Table 4). Worm specimens from all 6 infections reported in August have been confirmed as Guinea worms at CDC. The total number of GW infections reported in Ethiopia so far this year includes 7 dogs (2 contained), 2 humans (both contained) and 1 baboon (not contained), all of which occurred in Gog district. Surface water sources associated with all these infections have been treated with Abate (Figure 6).

In June, the EDEP conducted reward awareness surveys in Akobo, Jikawo, Lare, Makuye, and Wantawo districts of Gambella Region. Of 616 persons interviewed, 120 (19%) had heard of the cash reward. Overall, 12 of 13 rumored cases were investigated within 24 hours in the same region in June. Another survey of 2,304 residents in eight of the ten non-endemic districts of Gambella Region in July found 437 (19%) were aware of the cash reward, while 100% of 38 rumored cases were investigated within 24 hours.



of Gog Woreda treated monthly with ABATE. The human case in May 2015 was fully contained at the Abobo Woreda case containment center, and considered to have been infected in Bathor forest area of Gog Woreda during 2014, therefore imported from that locality. The human case in August was also contained.

Name 1= VAS 2= VNAS

PRC Agnuak Gog GambP###Vcm##e (Yes, No, If No, Date

or of of group of four men Pending) associated with activities in the forest area near Bathor village

(residence of December 2014 case

of GWD).

### MALI

Despite the insecurity, in July and August GW team members and health staff visited Tanzikratene, Nanguaye, and Fion settlements (which reported all of the 40 cases in Mali in 2014) several times, and a staff member of the program is also resident in Kidal town. Parasilame village which reported the only case in 2015, so far, is located about 20 kilometers from Fion, which reported a single case of GWD in 2014. The case containment center in Tanzikratene is staffed and ready to care for any patients that develop an emerging worm.

UNICEF completed repairs on September 14, 2015 to the mechanized water supply system in Tanzikratene, which reported 29 of Mali's 40 cases of GWD in 2014. It also repaired the water system in Tessit, another formerly endemic locality, and is in the process of repairing other boreholes in the area. Thank you UNICEF!

The national coordinator decided to classify the single case of GWD reported in Mali so far in 2015 as an August case based on the date of confirmation of the worm by the CDC. The case was considered a suspect case during July, and no one from the GWEP or the health system witnessed the emergence of the worm that the patient pulled out in late July until the CDC confirmed that worm to be GW in August. The same patient had a second worm emerge in early August but the specimen was not sent to the CDC since it came from the same person already declared a case of GWD (Table 5). A ceremony was organized at Fangasso in Tominian district of Segou Region to hand over the cash reward to the informant of this case during a visit by the program to Parasilame where the patient lives. The presumed source of this patient's infection has not been ascertained. Eight of the 11 patients with GWD reported from Tominian district over the past 8 years were of the Bobo ethnic group.

Mali's program reported a total of 316 rumors of cases in January-July 2015, of which 311 (98%) were investigated within 24 hours, compared to 151 rumors of cases reported in all of 2014. Another 33 rumored cases were reported in August 2015. A survey of reward awareness conducted in seven districts of Mopti Region in May-July 2015 found that 100% of 1,825 persons interviewed were aware of the reward for reporting a case of GWD. In July a survey of 1,868 persons in Ansongo district of Gao Region found that 91% knew of the cash reward.

# GLOBAL REWARD FOR CASES OF GUINEA WORM DISEASE

The International Commission for Certification of Dracunculiasis (ICCDE) has recommended that WHO begin preparatory work for the launch of the global cash reward, including developing a communication strategy for global messaging, preparing contracts with media agencies, and consulting with countries during

# RECENT PUBLICATIONS

Author unknown 2015. Unknown gunmen kill two humanitarian workers in West Darfur. *Sudan Tribune*. Sept. 11, 2015

Carter, J. 2015. Jimmy Carter Remains Stalwart in Vow to Eradicate Guinea Worm. *Weekend Edition Saturday (NPR)* [serial online]. August 22, 2015 <a href="http://www.npr.org/2015/08/22/433569465/jimmy-carter-remains-stalwart-in-vow-to-eradicate-guinea-worm">http://www.npr.org/2015/08/22/433569465/jimmy-carter-remains-stalwart-in-vow-to-eradicate-guinea-worm</a>