



Date: September 26, 2005



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

Subject: GUINEA WORM WRAP-UP #156

To: Addressees

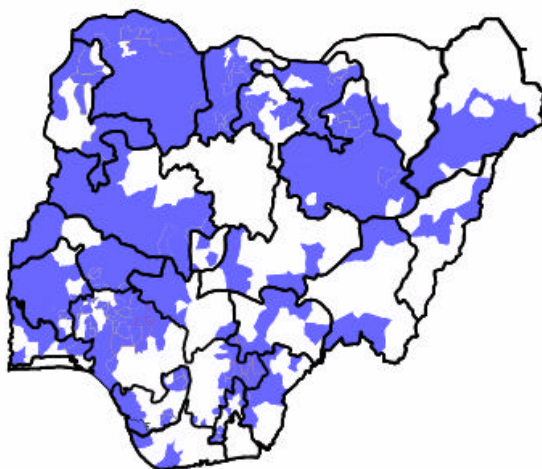
“Those who say it cannot be done should not interrupt the people doing it” Chinese proverb

NIGERIA ESTABLISHES CERTIFICATION COMMITTEE, 2006 TARGET

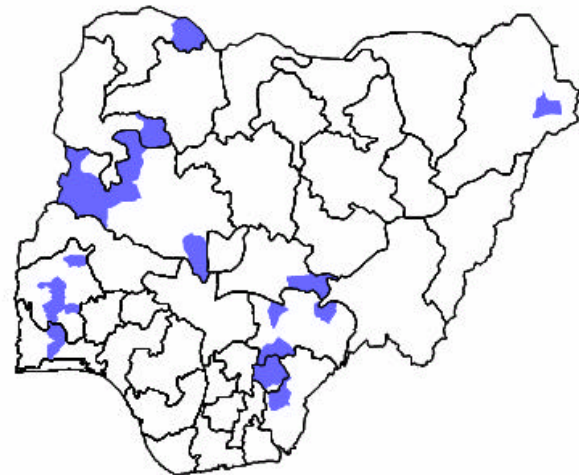
Nigeria's Guinea Worm Eradication Program (NIGEP) reported only one case of dracunculiasis in the entire country in August 2005, making a total of 116 cases reported in January-August this year: a reduction of -70% from the 395 cases reported during the same period of 2004. As of the end of August, the Northwest and Northeast Zones, which together comprise 12 of Nigeria's 36 states and the Federal Capital Territory, had reported no indigenous case for 13 consecutive months (Figure 1). In view of this progress, the Nigerian Federal Ministry of Health recently established a National Committee on Certification for Guinea Worm Disease Eradication (NCC-GWDE). The ten members of the Committee are Prof. A.B.O. Oyediran, Prof. Eka Braide, Prof. O.O. Kale, Prof L.D. Edungbola, Prof Akin Osibogun, Dr. Amos P. Bassi, Mrs. Theresa Pamma (UNICEF), Dr. L.K. Sadiq (WHO), Dr. E.S. Miri (The Carter Center), and Dr. K.A. Ojodu. NIGEP aims to interrupt transmission of dracunculiasis in 2006.

Figure 1

NIGERIA GUINEA WORM ERADICATION PROGRAM Local Government Areas Reporting Cases of Dracunculiasis



270,804 cases reported in July 1990 - June 1991



495 cases reported in 2004

The latest update on the status of the program in Nigeria was discussed at the annual Program Review in Abuja on September 7 under the chairmanship of former Nigerian head of state General (Dr.) Yakubu Gowon. General Gowon has personally spearheaded Nigeria's campaign to eradicate dracunculiasis in recent years, having led 69 visits to 123 endemic villages on behalf of the program since 1999. As of the end of July, NIGEP had contained 64% of its cases so far in 2005, and of the 92 villages that reported one or more cases since January 2004, 100% benefit from monthly health education, 100% have cloth filters

in all households, 66% have at least one source of safe drinking water, and 23% were using ABATE@ larvicide. NIGEP plans to extend offers of cash rewards for reporting of dracunculiasis cases nationwide. During the Program Review, General Gowon and the Technical Director of The Carter Center's Guinea Worm Eradication Program, Dr. Ernesto Ruiz-Tiben, presented the 2005 Jimmy and Rosalynn Carter Awards for Guinea Worm Eradication to Dr. Jabir Mohammed Abdullahi (consultant, Northwest Zone), Dr. Cephas Tsevende Ityonzughul (consultant, Northcentral Zone), Chief John Nkuda (formerly state Guinea worm coordinator for Ebonyi State), Mallam Dantani Sani Mohammed (chairman of Danko/Wasagu LGA, Kebbi State), and Mr. Walter Ogar Omang (senior zonal assistant, Danko/Wasagu LGA).



On September 9, UNICEF/Nigeria announced it had received a new donation of 33.3 million euros (~US\$41.4 million) from the European Commission for a UNICEF water and sanitation project to help provide safe drinking water for 2.1 million people in 1,400 rural communities in Abia, Cross River, Gombe, Kebbi, Osun and Plateau States over four years. The project also “aims to eradicate Guinea worm disease in Nigeria,” according to the announcement. These six states reported 71 of the 1,459 dracunculiasis cases in Nigeria in 2003, 37 of the 495 cases in 2004, and 3 of the 116 cases so far this year.

PRESIDENT AND MRS. CARTER VISIT MALI, NIGERIA AND ETHIOPIA



Former U.S. President and Mrs. Jimmy Carter visited three endemic countries—Mali, Nigeria and Ethiopia—during an African trip on September 9-15. In Bamako, they discussed the status of Mali's Guinea Worm Eradication Program with President Amadou Toumani Toure and Minister of Health Mrs. Zeinab Mint Youba after briefings by Carter Center resident technical advisor Dr. Mamadou Bathily and the national coordinator of Mali's GWEP, Dr. Gabriel Guindo. Mali is now the third-highest endemic country (after Sudan and Ghana), and has reported 139 indigenous cases in January-July 2005, nearly all in Ansongo, Douentza and Mopti Districts, compared to 45 cases in the same period of 2004. The Malian president and minister of health stressed their intensification of Mali's efforts, including a planned visit by President Toure to the endemic area in October 2005.

In Nigeria, President Carter and Federal Minister of Health Prof. Eytayo Lambo announced during a press conference that Nigerian President Olusegun Obasanjo had just agreed to provide the equivalent of US\$0.33 million to the Federal Ministry of Health over the next year to help NIGEP complete the eradication effort and begin preparing Nigeria for certification of eradication. This was part of a package of \$3.0 million that the Nigerian president pledged to help his ministry sustain dracunculiasis eradication and onchocerciasis control, and scale up lymphatic filariasis elimination and schistosomiasis control over the next year, with assistance from The Carter Center and others. President Carter and his party, which included Carter Center Trustees John Moores, Richard Blum, and Dr. James Wagner (Emory University president), and Carter Center executive director Dr. John Hardman, were also accompanied in Nigeria by country representative Dr. Emmanuel Miri and his team as well as senior health directors from Carter Center headquarters who had participated in the in-country review of all Carter Center-assisted health programs the week before the Carters arrived. The Program Review, President Carter's visit, and the press conference with the federal minister of health generated substantial coverage in the Nigerian press, radio and national television.

The visit to Ethiopia focused primarily on a visit to a village where trachoma control efforts are being assisted by The Carter Center and Lions Clubs International Foundation. The Ethiopian Minister of Health Dr. Kebede Tadesse, Carter Center country representative Mr. Teshome Gebre, and others accompanied President Carter and his party. President Carter met subsequently in London with Prime Minister Meles Zenawi, who assured him that Ethiopia's Dracunculiasis Eradication Program should now have full access to the Gambella Region and be able to interrupt transmission of the disease there soon.

Table 1

Number of Cases Contained and Number Reported by Month during 2005*
(Countries arranged in descending order of cases in 2004)

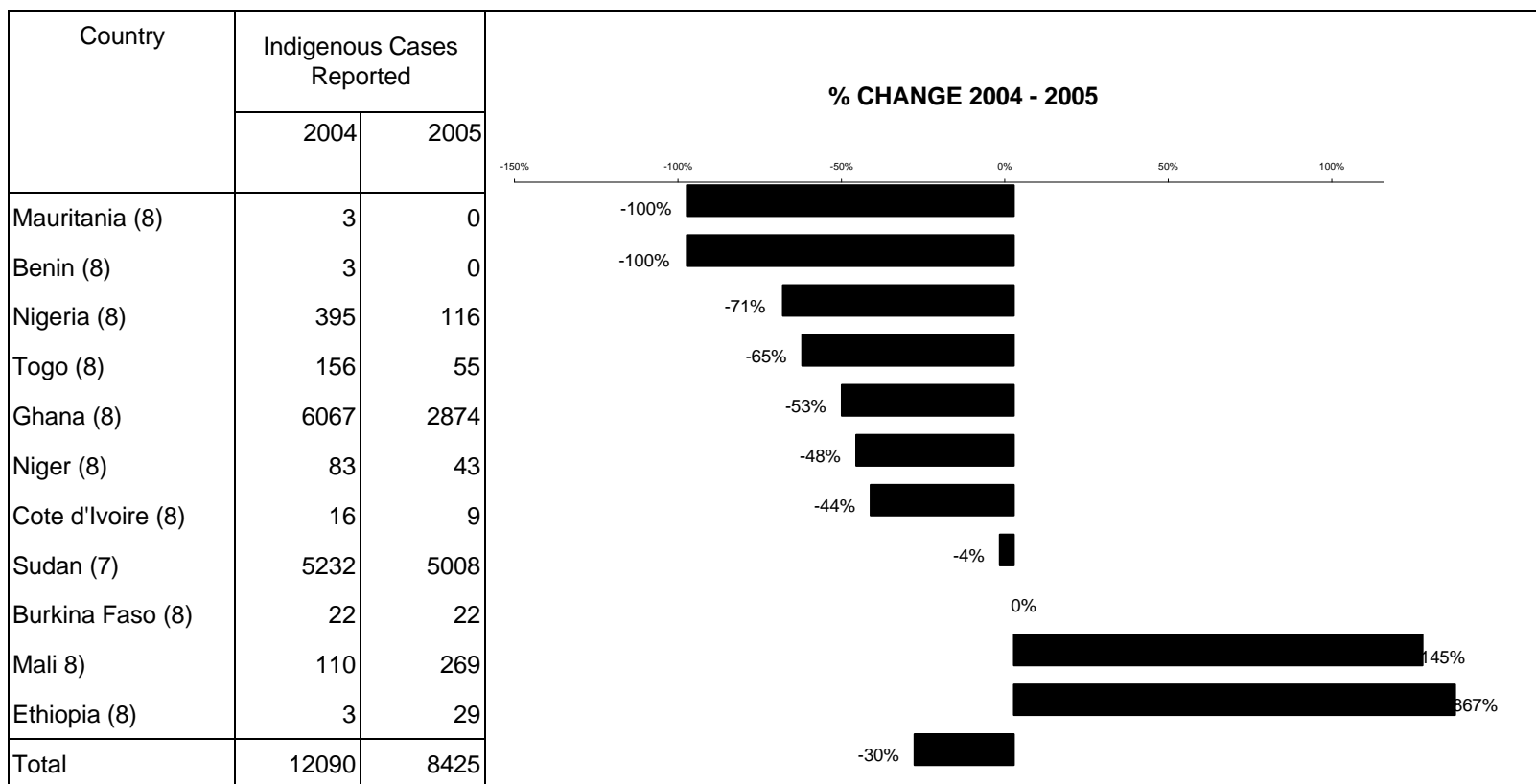
COUNTRIES REPORTING CASES	NUMBER OF CASES CONTAINED / NUMBER OF CASES REPORTED													%
	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL*	CONT.
GHANA	374 / 544	343 / 483	282 / 393	249 / 396	332 / 458	244 / 386	97 / 161	20 / 53	/	/	/	/	1941 / 2874	68
SUDAN	0 / 88	0 / 131	1 / 375	5 / 752	9 / 1855	0 / 1499	9 / 308	/	/	/	/	/	24 / 5008	0
NIGERIA	25 / 36	13 / 17	9 / 13	11 / 29	7 / 9	4 / 6	4 / 5	1 / 1	/	/	/	/	74 / 116	64
MALI	3 / 4	1 / 1	1 / 1	1 / 1	22 / 25	25 / 25	40 / 82	97 / 130	/	/	/	/	190 / 269	71
NIGER	2 / 2	4 / 4	1 / 1	1 / 4	1 / 3	3 / 3	5 / 7	23 / 23	/	/	/	/	40 / 47	85
TOGO	11 / 11	1 / 4	2 / 2	3 / 3	16 / 19	7 / 8	5 / 6	1 / 4	/	/	/	/	46 / 57	81
BURKINA FASO	0 / 0	0 / 0	0 / 0	1 / 1	0 / 0	3 / 3	0 / 5	13 / 16	/	/	/	/	17 / 25	68
COTE D'IVOIRE	0 / 0	0 / 0	1 / 1	0 / 0	0 / 0	0 / 4	1 / 3	1 / 1	/	/	/	/	3 / 9	33
BENIN	0 / 0	0 / 0	1 / 1	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	/	/	/	/	1 / 1	100
ETHIOPIA	2 / 2	0 / 0	0 / 0	3 / 3	7 / 7	16 / 20	2 / 2	2 / 3	/	/	/	/	32 / 37	86
MAURITANIA	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	/	/	/	/	0 / 0	0
UGANDA	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	4 / 4	1 / 1	0 / 0	/	/	/	/	5 / 5	0
TOTAL*	417 / 687	362 / 640	298 / 787	274 / 1189	394 / 2376	306 / 1958	164 / 580	158 / 231	0 / 0	0 / 0	0 / 0	0 / 0	2373 / 8448	28
% CONTAINED	61	57	38	23	17	16	28	68					28	

* provisional

Shaded cells denote months when zero indigenous cases were reported. Numbers indicate how many imported cases were reported and contained that month.

Figure 2

Number of Indigenous Cases Reported During the Specified Period in 2004 and 2005*, and Percent Change in Cases Reported



(7)Indicates months for which reports were received, i.e., Jan-July 2005
Provisional

GHANA'S MINISTER OF HEALTH, MISS GHANA 2005 VISIT HIGHEST ENDEMIC AREAS



Highlighting Ghana's campaign to stop Guinea worm disease by the 50th Golden Anniversary celebration of Ghana's independence on March 6, 2007 (see *Guinea Worm Wrap-Up #155*), Minister of Health Major Courage Quashigah (Rtd.) visited the village of Diare in Savelugu/Nanton District of the Northern Region on September 2nd. At the public durbar, the minister described Guinea worm disease as "an enemy of the national economy" for which reason "all efforts must be made to eradicate it." The minister said that Ghana needed to be free of Guinea worm disease by her 50th birthday, and that in military parlance a "full scale attack" against GWD was required nationwide. He commended the work of the community health workers of the Ghana Health Service, their partners, and all other stakeholders. The minister of health was accompanied by the regional minister for Northern Region, the regional director of health services, members of the District Assembly, eight traditional leaders and representatives of several partners. The honorable minister's mobilization visit was followed soon thereafter by that of Miss Ghana 2005, Miss Lamisi Mbillah who began her first sensitization tour of Guinea worm endemic areas in late September, with visits to Tolon/Kumbungu, Savelugu/Nanton, Tamale and Yendi Districts of Northern Region, including the village of Diare. Dr. George Amofa, director of the public health division of the ministry of health accompanied Miss Mbillah on her inaugural tour in support of Ghana's Guinea Worm Eradication Program. Miss Mbillah's straightforward message was "Please filter or boil your water before you drink it and those who are infected with the disease should stay away from contaminating the sources of drinking water". Ghana has reported -53% fewer indigenous cases of dracunculiasis in January-August 2005 than during the same period of 2004 (2,874 vs. 6,067), and it has contained 68% of this year's cases so far (Table 1, Figures 2 and 3). Ghana has now reported fewer cases than Sudan in 2005.

The June 2005 external evaluation of surveillance in four of Ghana's highest endemic districts that was described in *Guinea Worm Wrap-Up #154* and which concluded "there is serious underreporting of individual cases [of dracunculiasis]", may have overestimated the degree of underreporting in the four districts. Many of the 122 "cases" reportedly found by the evaluators, only 68 of which "cases" had been recorded by the eradication program, were alleged by the household informants to have occurred at some time between January 2005 and the evaluators' visit in June. It is impossible to know how many of the retrospectively alleged "cases" met the case definition, which defines a case of Guinea worm disease as "an individual exhibiting a skin lesion or lesions with emergence of one or more guinea worms" (WHO, 2003. *Weekly Epidemiological Record* 78:323).

STATUS OF CASES IN 2005 IN BURKINA FASO AND COTE D'IVOIRE

Tables 2 and 3 summarize a partial line listing of cases of Guinea worm disease reported so far from Burkina Faso, using a revised format to help visualize the timing of worm emergence and the timing of interventions implemented to prevent transmission of the parasite from each patient. In Burkina Faso ABATE® larvicide was used before or within 10 days of emergence of the worm in cases #1.1- 8.1, thus may have prevented transmission of the parasite even though only 5 of those 8 cases were reportedly contained, while the status of ABATE usage is still uncertain in cases #9.1-25.1. Similarly, in the case of Cote d'Ivoire transmission from only one of 8 cases reported during January – July may have been contained by the use of ABATE within 10 days of worm emergence. Guinea Worm Eradication Programs need to strive to detect all cases within 24 hours of worm emergence and apply ABATE® larvicide in all sources of drinking water contaminated by the patient(s) within 10 days.

Table 2

Line-Listing of Cases of Guinea Worm Disease and Interventions Against Transmission in Countries Reporting Few Cases.

Burkina Faso GWEP

Case #	Date					# of worms that emerged during this period	Name of		Age	Sex	Ethnic group	Occupation	Probable Origin of infection (name of this village, other village, district or country)
	Worm emerged	Village volunteer began containment	Case & containment confirmed by supervisor	Case declared contained	ABATE used this year (as a result of this case)		Village	District					
1.1*	4-Apr	4-Apr	??	Yes (date?)	6-Apr	??	Zindi	Batie	7	F	Dagara	Child	Ghana
1.2*													
2.1	June??	16-Jun	??	Yes (date?)	23-Apr	??	Bougui	Fada	55	F	Peulh	Housewife	Bougui, BF ?
3.1	24-Jun	24-Jun	??	Yes (date?)	23-Apr	??	Bougui	Fada	23	M	Peulh	Herder	Bougui, BF ?
4.1	23-Jun	24-Jun	??	Yes (date?)	25-Apr	??	Pelga/Sigre	Boulsa	30	F	Mossi	Housewife	Cote d'Ivoire ?
5.1	13-Jul	15-Jul	??	No	20-Apr	??	Damkarko	Boulsa	16	F	Mossi	Housewife	Kouini, BF
6.1	17-Jul	19-Jul	??	No	24-Apr	??	Kouni	Boulsa	22	F	Mossi	Housewife	Kouini, BF
7.1	13-Jul	16-Jul	??	No	25-Apr	??	Nagbingou	Boulsa	26	F	Mossi	Housewife	Nagbingou, BF
8.1	23-Jul	24-Jul	??	Yes (date?)	25-Apr	??	Kouni	Boulsa	4	F	Mossi	Child	Kouini, BF
9.1	29-Jul	29-Jul	??	Yes (date?)	??	??	Foufarga	Barsalogo	14	M	Mossi	Trader	????
10.1	??	20-Jul	??	No	20-Apr	??	Nabenia	Po	55	M	Kassena	Farmer	Ghana
11.1	17-Aug	22-Aug	??	No	??	??	Bourele	Djibo	36	M	Mossi	Farmer	????
12.1	31-Jul	1-Aug	??	Yes (date?)	??	??	Baffe	Dori	54	M	Peulh	Trader	????
13.1-25.1	??	??	??	??	April 4 and April 25	??	Kouni	Boulsa	?	?	?	?	????

1.1* = Serial case # 1 and first Guinea worm that emerged during calendar year.

1.2* = Serial case # 1 and second Guinea worm that emerged during calendar year.

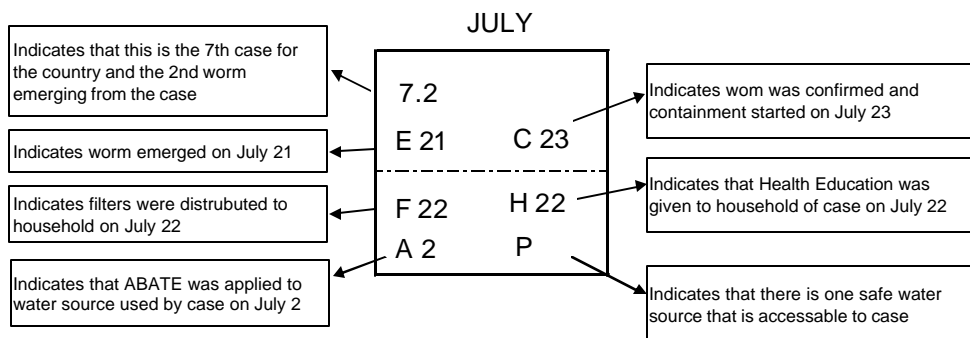
2.1 = Serial case # 2 and first Guinea worm that emerged from patient during calendar year.

Insert additional rows (using EXCEL) to record additional Guinea worms that might emerge from persons previously declared "a case of GWD" as shown above. For example, row with case # 1.2 below case # 1.1 would indicate a second Guinea worm emerged from patient (case # 1.1) and other data associated with the containment of the second worm. Repeat as 1.3 should a third Guinea worm emerge from patient (case # 1.1), and similarly for other cases, if applicable.

Table 3

Burkina Faso Guinea Worm Eradication Program														
Dates and Types of Interventions Implemented to Contain Transmission from Cases of Guinea Worm Disease														
Case #	Date of worm emergence	District	2005											
			JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1.1	4-Apr	Zindi				1.1 E4	C4							
		Batie				A6	A11	A8						
2.1	June??	Fada Bougui				A19	A20	2.1 E7	C16					
		Fada Bougui				A19	A20	3.1 E24	C24					
3.1	24-Jun	Fada Bougui				A19	A20	A23	A8					
4.1	23-Jun	Boulsa Pelga/Silgre						4.1 E23	C24	A25	A26	A22		
5.1	13-Jul	Boulsa Damkarko							5.1 E13	C15	A20			
6.1	17-Jul	Boulsa Kouini					A25	A27	6.1 E17	C19	A4,25	A1		
7.1	13-Jul	Boulsa Nagbingou					A25	A27	7.1 E13	C16	A4,25	A1		
8.1	23-Jul	Boulsa Kouini					A25	A27	8.1 E23	C24	A4,25	A1		
9.1	29-Jul	Barsalogo foufarga							9 E29	C29				
10.1	July??	Po Nabenia							10 E?	C20	A20	A25		
11.1	17-Aug	Djibo Bourele								11 E17	C22			
12.1	31-Jul	Dori Baffe							12 E31		C1			
13.1-25.1		Boulsa Kouini					A25	A27	3 cases	10 cases	A4,25	A1		
		TOTAL (average)												

sample



IN BRIEF:

Sudan. The Sudan Guinea Worm Eradication Program has reported a total of 5,008 cases in January-July 2005, which is a reduction of -18% from the cases reported during the same period of 2004. This year's Program Review for Sudan is being planned to be held at The Carter Center on October 26-27.

Niger. With the support of The Carter Center, the Guinea Worm Eradication Program has engaged Mr. Sabo Hassan Adamou, the former Guinea worm coordinator of the Zinder region, to work as a technical advisor for the program in the Tillaberi region. Mr. Sabo recently returned to Niger after earning a Master of Public Health degree in community health. The Tillaberi region has reported 97% of Niger's Guinea worm cases so far this year. The Embassy of Japan accredited to Niger is considering granting

The Carter Center a new Small Scale Grant Aid of approximately \$91,000 in support of the Center's assistance to Niger's Guinea Worm Eradication Program. These funds will be used to purchase filters, t-shirts, Guinea worm cloth, and health education posters.

Mr. Jean Pierre Mert, WHO (Geneva), recently visited the Tillaberi District, Niger, to assess the status of ongoing efforts to map (determine the latitude and longitude) of localities inhabited by the nomadic groups in this district. Mapping of these localities by Niger's Guinea Worm Eradication Program staff has been effective in improving surveillance and implementing interventions not only against Guinea worm disease but also against malaria, reported Mert.

UPDATE ON UNICEF/GATES WATER SUPPLY FOR MALI, NIGER, AND TOGO

Mali. As of mid-August, 4 of the 14 targeted endemic villages have wells and hand pumps with flowing water since July. Outstanding issues between UNICEF/Mali and the ministry of water supply (*Hydraulique*) have been resolved. The remaining ten wells are to be completed between October 1 and November 30, 2005. These 14 villages reported **24%** of Mali's cases in January – July 2005.

Niger. Contractors have been selected to construct 2 large diameter draw wells and 10 new borehole wells with hand pumps for the sites selected under the UNICEF/Gates grant agreement. Construction will start in October, after the rains subside. These 12 endemic villages reported **30%** of Niger's indigenous cases in January – July 2005.

Togo. Successful bore hole wells have been drilled in 5 endemic villages in southern Togo, but not yet fitted with hand pumps as of September 23rd. Work is progressing in all 9 other villages targeted to receive new borehole wells. Drilling is expected to be completed by mid-October and all 14 hand pumps installed by the end of October.

TRANSITIONS

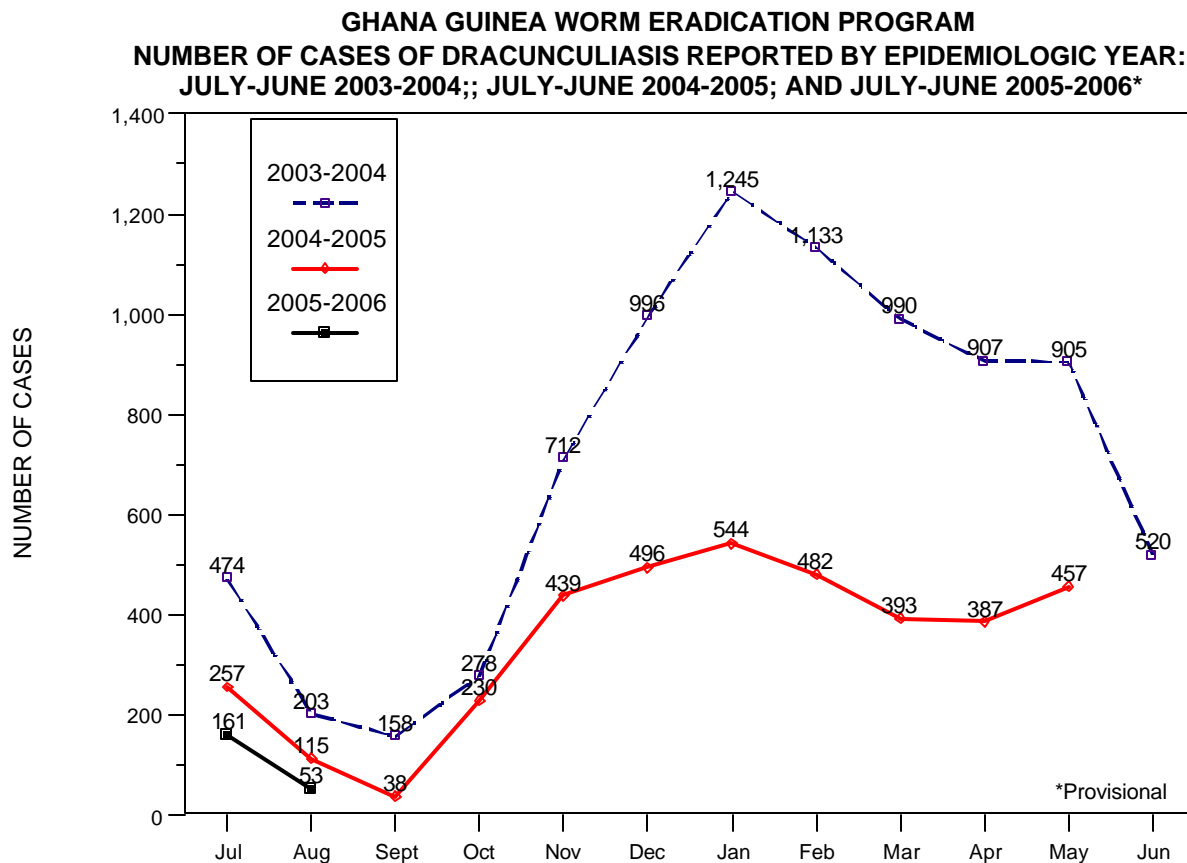
We are pleased to announce that Mr. Philip Downs will become The Carter Center Resident Technical Advisor (RTA) to Ghana's Guinea Worm Eradication Program beginning October, 3, 2005. After 14 months as RTA Mr. Aryc Mosher is transferring to The Carter Center, Atlanta, as Senior Program Officer. Aryc will assist Dr. Ernesto Ruiz-Tiben Technical Director, Dracunculiasis Eradication, The Carter Center. Thank you Aryc for your hard work and contributions to the progress against Guinea worm disease in Ghana. Good Luck Philip!!

Mr. Stephen Becknell and Ms Alison Mitchel will also assist Ghana's GWEP as temporary Technical Advisors beginning in October and November, respectively.

BELIEF

Belief in our ability to eradicate Guinea worm disease is based on the knowledge that we can effectively intervene and stop transmission of this disease in every locality where it occurs. Belief is also the inner feeling that what we undertake, we can accomplish. For the most part, all of us have the ability to look at something and to know whether or not we can do it. So in belief, there is power: our eyes are opened; our opportunities become plain; our vision becomes reality. We have already stopped transmission of Guinea worm disease in 11 of 20 affected countries, there are far fewer cases and endemic villages to deal with, we now have the resources, and the experience and know-how to stop transmission quickly in the remaining 9 endemic countries. Now is the time for all of us to concentrate on the vision of ending Guinea worm disease forever. You can help make that vision a reality, and very soon.

Figure 3



WHO PRODUCES NEW FILM ON GWD ERADICATION

“The Final Sprint” is a 15 minute video film produced by WHO about Guinea Worm Eradication, filmed in Ghana and Burkina Faso in April 2005. English and French language versions are available. Interested persons can obtain a free copy from Dr. Ahmed Tayeh, World Health Organization, 20 Avenue Appia, CH-1211 Geneva 27, Switzerland.

*Inclusion of information in the Guinea Worm Wrap-Up does not constitute “publication” of that information.
 In memory of BOB KAISER.*

For information about the GW Wrap-Up, contact Dr. Sharon Roy, WHO Collaborating Center for Research, Training, and Eradication of Dracunculiasis, NCID, Centers for Disease Control and Prevention, F-22, 4770 Buford Highway, NE, Atlanta, GA 30341-3724, U.S.A. FAX: 770-488-7761. The GW Wrap-Up web location is <http://www.cdc.gov/ncidod/dpd/parasites/guineaworm/default.htm>



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