



Date: January 26, 2004



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

Subject: GUINEA WORM WRAP-UP #139

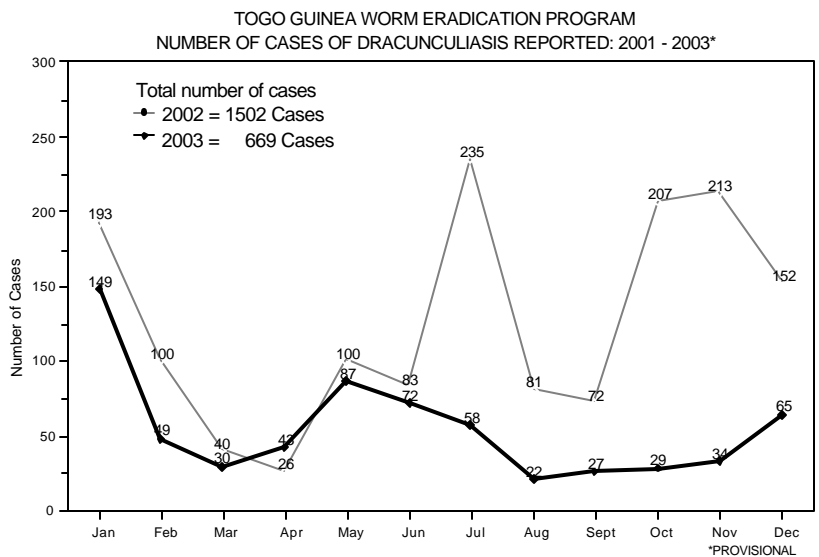
To: Addressees

**Did Any Indigenous or Imported Case of Dracunculiasis Escape Detection in Your Area This Month?**

**TOGO REPORTS -58% FEWER CASES FOR 2003, OVERTAKES MALI**

Figure 1

Togo's Guinea Worm Eradication Program has reported only 625 indigenous cases in 2003, compared to 1,473 indigenous cases in 2002, realizing a reduction in cases of -58% for the year. This is the lowest total number of cases of dracunculiasis that Togo has ever reported since its program began, bringing Togo for the first time well below Mali, which has already reported 818 indigenous cases in 2003. Togo also reported 47 cases imported from Ghana in 2003, and is now the fifth highest endemic country for dracunculiasis, as a result of its dramatic progress last year. Togo's 669 cases in 2003 were reported from 71 endemic villages (reporting 514 indigenous cases), and 87 villages (reporting 155 imported cases), including the 47 cases imported from Ghana. A total of 83 villages reported only one case each, and only 30 villages that reported five or more cases. The remaining endemic areas are concentrated in four districts: Haho, Ogo, Sotouboua, and Keran. 74% of the cases reported in 2003 were contained, including [78 (12%)] in case containment centers, compared to 62% of cases that were reportedly contained in 2002. Togo's national Program Coordinator is Mr. K. Ignace Amegbo. US Peace Corps, UNICEF and WHO have assisted this program over the years, in addition to The Carter Center/Global 2000 and The Government of Japan.



**Measurable Objectives for Ghana, Niger, and Togo for 2004**

In past issues of the Guinea Worm Wrap-Up we have asked "Does your Guinea Worm Eradication Program have specific measurable objectives for 2004?" Most countries have responded. Below are the stated objectives for three endemic countries. Since the goal of the campaign to eradicate dracunculiasis is to stop transmission of the disease everywhere it occurs, we underscore the importance of having sufficient surveillance capacity in each village with endemic transmission to meet the first requirement of the standards for containment of transmission from cases, i.e., to detect all cases of the disease within 24 hours of the emergence of the Guinea worm. This should be the first of all measurable objectives for each of the national Guinea Worm Eradication Programs. Two other important objectives that need to be included in these lists are: 1) Investigate the origin of all imported cases of GWD, and 2) obtain monthly reports from all endemic villages on time.

Ghana: proposed 2004 objectives

- 1) Contain > 80% of all cases reported – (61% in 2003).
- 2) Admit 80% of cases admitted to a case containment center within 24 hours of GW emergence -- (70% in 2003).
- 3) Achieve and maintain 100% coverage (of all households) in all eligible EVs – (95% in 2003).
- 4) Ensure 100% pipe filter coverage (accompanied with appropriate health education on their use and care) to eligible populations in the top eleven endemic districts.
- 5) Monitor provision of adequate functioning sources of drinking water in the 100 most endemic communities.
- 6) Monitor whether at least 90% of 180 new safe water sources provided by the Government of Ghana are placed in endemic villages that reported 5+ cases of GWD in 2003.
- 7) Seek to provide GW-free drinking water from dams in 5 villages, in which significant impact on stopping transmission would be expected, using low-cost technologies.
- 8) Perform spot checks on copepods after treatment with ABATE® in 5 selected endemic villages per month. (0% in 2003).
- 9) Conduct at least one Worm Week in each of the top 20 endemic districts (top 15 in 2003).
- 10) Ensure that all primary and secondary schools in the top 20 endemic districts teach about GWD prevention.
- 11) Disseminate radio messages (new jingles, skits, public service announcements) about GWD at least twice weekly during the peak transmission season by all available stations in the three top endemic regions.
- 12) Conduct active surveillance in all villages that have reported indigenous cases of GWD in the last 3 calendar years.
- 13) Advocate for the establishment and management of an integrated nation-wide community-based surveillance system (CBSS) led by the Ministry's of Health National Surveillance Unit.

Niger: proposed 2004 objectives.

- 1) Contain >90% of all cases reported.
- 2) Of cases admitted to case containment centers, admit >75% within 24 hours of emergence of the GW.
- 3) Contain >30% of all cases in containment centers.
- 4) Maintain 100% coverage of households with filters, including appropriate education on their use and care in >95% of endemic localities.
- 5) Provide pipe filters and conical filters, and appropriate education on their use and care to all eligible populations.
- 6) Monitor monthly the provision of safe drinking water (or filtered water) and adequate functioning of existing hand pumps in all endemic localities, where these exist.
- 7) Perform spot checks for copepods in sources of drinking water treated ABATE® in the top 20 endemic localities (0% in 2003).
- 8) Conduct one Worm Week annually in each of the highest endemic districts.
- 9) Ensure that all existing primary and secondary schools in the top 20 endemic localities teach about prevention of GWD.
- 10) Ensure radio messages (news, jingles, skits, public service announcements) are broadcast at least twice weekly in the appropriate local language, during the peak transmission season by all available stations in the highest endemic areas of the country.

Togo: proposed 2004 objectives

- 1) Fully contain at least 85% of all cases (76% in 2003).
- 2) Admit at least 75% of cases to case containment centers within 24 hours of worm emergence and 100% within 48 hours. (# ?? Admitted within 24 hours in 2003).
- 3) Contain 80% or more of all cases reported in the prefectures of Haho, Yoto, Ogou, Est-Mono, Keran, and Oti, in the containment centers in those prefectures (51% in 2003).
- 4) Monitor GWD in all formerly endemic villages and other at-risk villages in currently endemic prefectures once per quarter. ( ?? in 2003).
- 5) Ensure that all endemic villages provide cloth filters to 100% of households (82% in 2003).
- 6) Perform spot checks for copepods in sources of drinking water treated with ABATE® in the top 20 endemic villages (0% in 2003).
- 7) Monitor monthly the provision of safe drinking water (or filtered water) and adequate functioning of existing hand pumps in all endemic localities, where these exist.
- 8) Obtain accurate and complete reports from all endemic villages by the 15<sup>th</sup> of each month (? In 2003).
- 9) Ensure that all primary and secondary schools in the 4 most endemic prefectures teach about GWD prevention. (? In 2003).
- 10) Ensure radio messages (news, jingles, skits, public service announcements) are broadcast at least twice weekly in the appropriate local language, during the peak transmission season (September – January) by all available stations in the 4 most endemic prefectures (Sotouboua, Keran/Oti, Haho, and Ogou) and in the prefectures of Ave/Agou, and Zio.
- 11) Conduct one Worm Week annually in each of the highest endemic prefectures.

## **ITFDE REVIEWS GWEP, MAKES RECOMMENDATIONS**

The International Task Force for Disease Eradication (ITFDE) reviewed the status and strategies of the Dracunculiasis Eradication Program (DEP) at its fifth meeting in October 2003. The final conclusions and recommendations from that review are as follows:

1. The Task Force reaffirms the previous Task Force's conclusions that dracunculiasis is eradicable, with additional assurance provided by results achieved over the past decade.
2. The Task Force commends the good progress of the global campaign, including in Sudan, despite the civil war there.
3. The DEP should continue using current strategies to implement control measures as extensively as possible in all accessible areas, while continuing to explore innovative approaches wherever appropriate, especially for Sudan.
4. Given the campaign's impressive achievements so far, the apparently imminent settlement of Sudan's civil war, and the need for escalated political and financial support of the final push to complete the eradication of dracunculiasis, more aggressive advocacy and publicity is strongly recommended, including beyond the endemic countries themselves.
5. Data regarding the efficacy of pipe filters, case containment centers, Worm Weeks, etc., should be published in scientific journals, with appropriate statistical data, in order to document the contributions of these apparently effective innovations to the success of the program.

Table 1

Number of cases contained and number reported by month during 2003\*  
(Countries arranged in descending order of cases in 2002)

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	260 / 1175	122 / 702	270 / 872	255 / 1185	257 / 2309	240 / 2523	279 / 2591	280 / 2316	304 / 1713	569 / 2448	544 / 1314	/	3380 / 19148	18	
GHANA	485 / 900	769 / 1339	555 / 944	622 / 940	524 / 785	374 / 558	288 / 474	126 / 203	81 / 158	150 / 278	352 / 712	426 / 994	4752 / 8285	57	
NIGERIA	389 / 568	179 / 243	103 / 125	53 / 60	30 / 52	49 / 58	46 / 68	36 / 50	22 / 31	28 / 32	53 / 63	87 / 108	1075 / 1458	74	
TOGO	110 / 149	28 / 44	21 / 29	38 / 44	73 / 87	53 / 72	53 / 63	14 / 22	18 / 27	24 / 29	25 / 35	37 / 68	494 / 669	74	
MALI	3 / 3	4 / 4	5 / 5	2 / 3	3 / 3	8 / 8	42 / 84	92 / 160	122 / 250	106 / 206	37 / 73	16 / 23	440 / 822	54	
BURKINA FASO	6 / 6	1 / 2	0 / 1	3 / 5	14 / 16	27 / 62	24 / 34	12 / 19	12 / 21	11 / 18	4 / 12	5 / 7	119 / 203	59	
NIGER	0 / 0	1 / 1	0 / 0	2 / 2	0 / 0	6 / 6	27 / 37	30 / 47	33 / 71	11 / 73	22 / 38	13 / 18	145 / 293	49	
COTE D'IVOIRE	7 / 21	5 / 8	1 / 2	1 / 4	3 / 3	1 / 2	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	18 / 40	45	
BENIN	21 / 21	1 / 1	1 / 1	0 / 0	0 / 0	0 / 0	2 / 2	0 / 0	0 / 0	2 / 2	1 / 1	2 / 2	30 / 30	100	
ETHIOPIA	0 / 0	0 / 0	3 / 3	7 / 7	7 / 7	5 / 5	1 / 1	1 / 1	4 / 4	0 / 0	0 / 0	0 / 0	28 / 28	100	
MAURITANIA	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	1 / 1	2 / 3	1 / 1	3 / 4	2 / 3	0 / 0	1 / 1	10 / 13	77	
UGANDA	0 / 0	0 / 0	0 / 0	3 / 3	9 / 11	4 / 6	1 / 2	0 / 2	0 / 0	2 / 2	/	0 / 0	19 / 26	73	
KENYA	/	/	/	/	2 / 2	/	/	/	/	/	/	/	2 / 2	100	
TOTAL*	1281 / 2843	1110 / 2344	959 / 1982	986 / 2253	922 / 3275	768 / 3301	765 / 3359	592 / 2821	599 / 2279	905 / 3091	1038 / 2248	587 / 1221	10512 / 31017	34	
% CONTAINED	45	47	48	44	28	23	23	21	26	29	46	48	34		

\* PROVISIONAL

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

For other imported cases see table of imported cases by month and by country.

Figure 2

**Distribution by Country of 30,894 Indigenous Cases of Dracunculiasis Reported during 2003\***

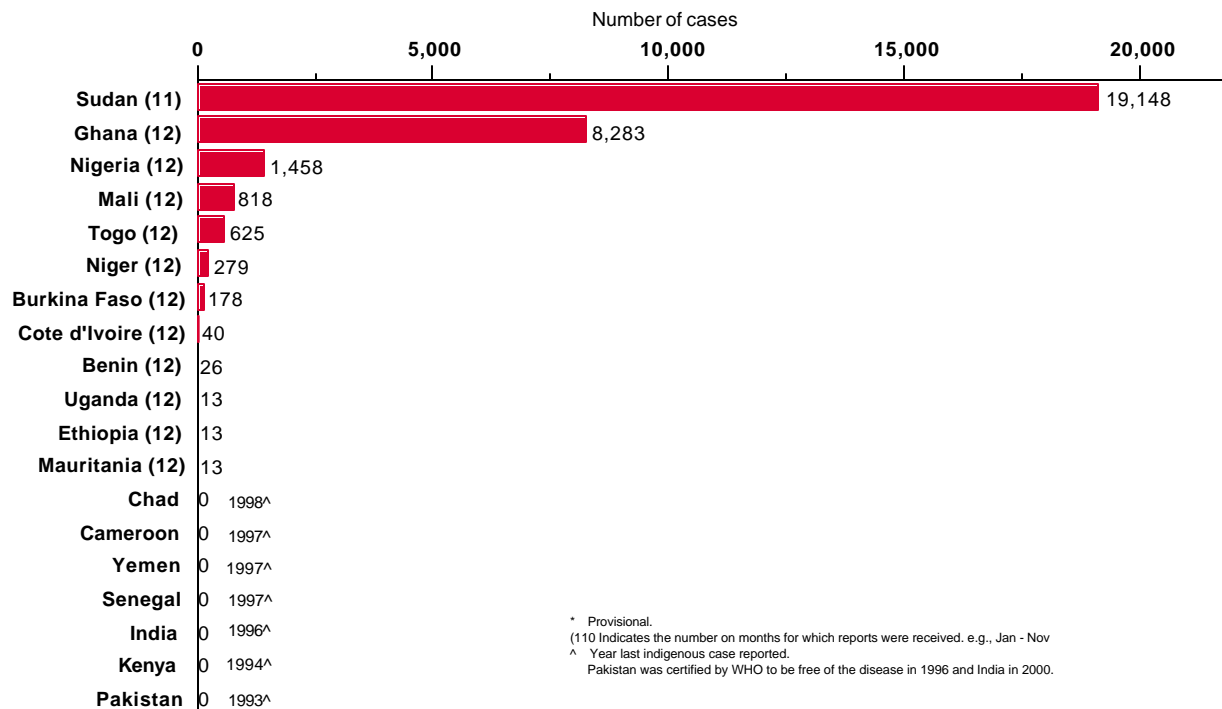
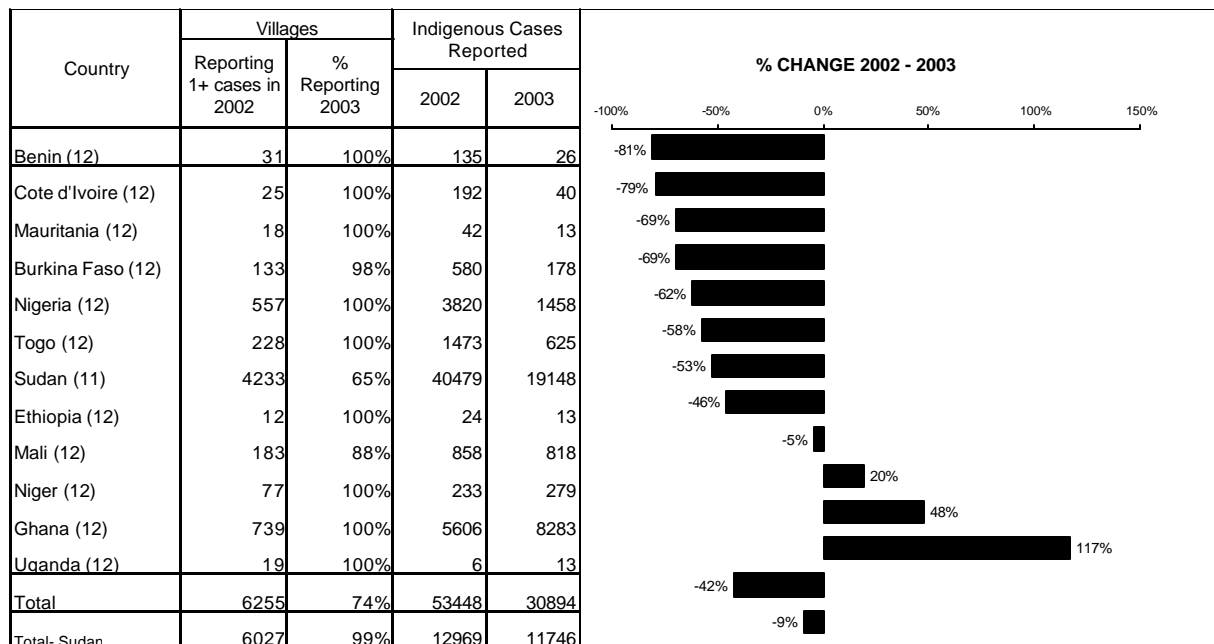


Figure 3

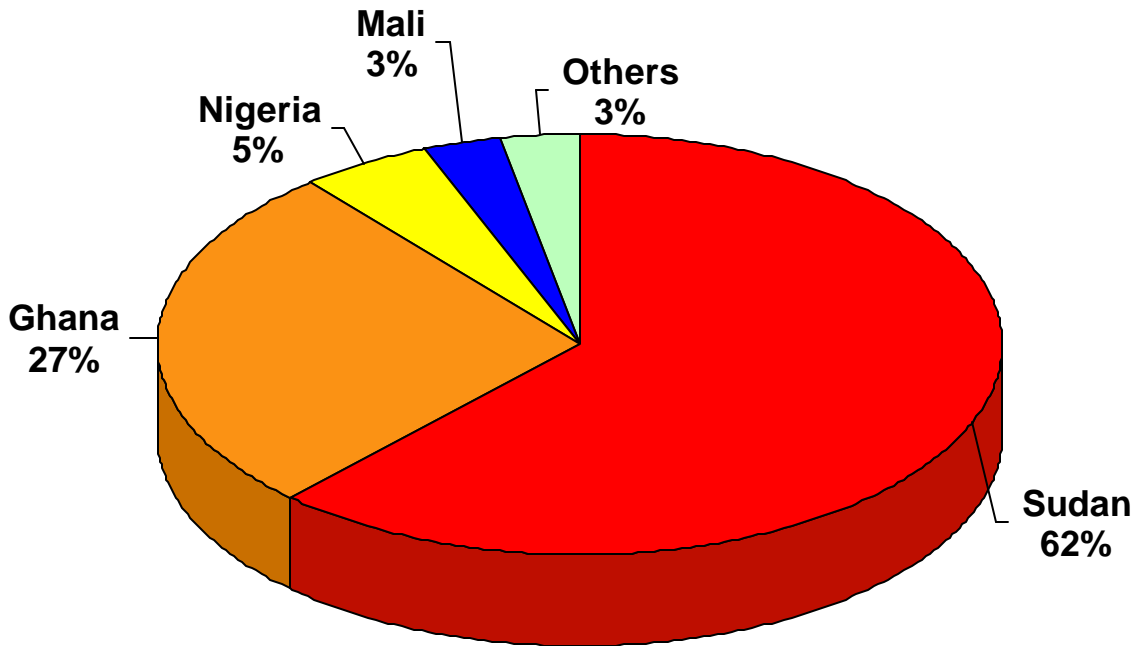
**Number of Villages/Localities Reporting Cases of Dracunculiasis in 2002, Percentage of Endemic Villages Reporting in 2003\*, Number of Indigenous Cases Reported During the Specified Period in 2002 and 2003\*, and Percent Change in Cases Reported**



(11) Indicates month for which reports were received, e.g., Jan. - Nov. 2003  
 \* Provisional

Figure 4

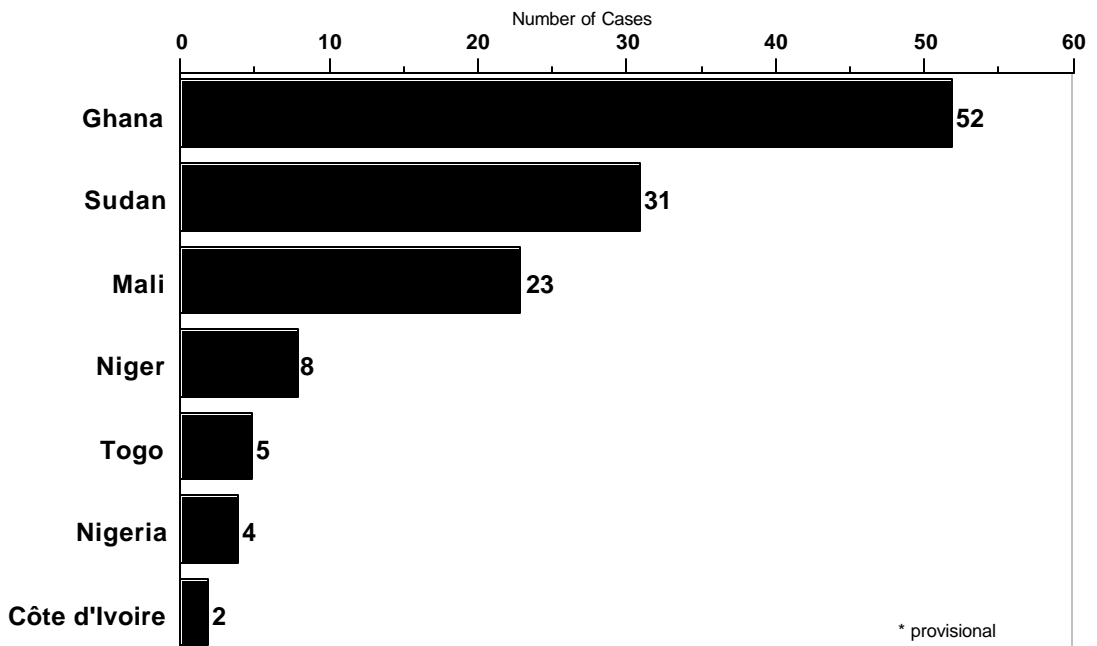
### Distribution of 30,894 Cases of Dracunculiasis Reported During 2003\*



\* provisional

Figure 5

### Distribution by Country of Origin of 123 Cases of Dracunculiasis Exported to Other Countries During 2003\*



\* provisional

6. The national GWEPs should be urged to record, compile, and compare data about the intervals between worm emergence, detection, and beginning containment measures in individual patients. The distribution of such intervals should be monitored and “outliers” investigated, in addition to calculating average intervals.
7. Cross-border meetings and prompt cross-border notification of imported cases require additional attention at this stage.
8. There is a need to establish quickly sustainable surveillance networks so as to assure adequate surveillance of dracunculiasis in the post-eradication period, which already exists in large parts of some still endemic countries.
9. While existing interventions are adequate for eradicating dracunculiasis, discovery of an effective treatment by an existing anti-microbial agent or agents would be a welcome addition to operations in the final stages, especially in Sudan. The Task Force suggests that consideration be given to exploiting any available opportunities to document impact on dracunculiasis of mass treatment with albendazole and ivermectin (for onchocerciasis and lymphatic filariasis), and during phase 3 trials of moxidectin against onchocerciasis in areas where onchocerciasis and dracunculiasis are co-endemic. Continued genomic sequencing of *D. medinensis* DNA also bears consideration, as it would help ascertain the species of this and closely related parasites, it could serve as a sensitive probe for commensal *Wolbachia*, and it would provide another tool to evaluate potential susceptibility of *D. medinensis* to anti-helminthics.

#### **IN BRIEF:**

**Ghana's** GWEP held a meeting in Tamale, Northern Region on December 16-17 to review the program's status and prepare objectives for 2004. Participants included the regional ministers from Northern and Brong-Ahafo Regions, the Deputy Minister of Health, Mr. Dani Baah, and several other high officials from the ministry of health and from the four main endemic regions remaining, as well as representatives from UNICEF, WHO and The Carter Center/Global 2000.

**Niger's** GWEP held its annual review at Ayerou, in Tillabery Region, on 12-14 December. The Opening Ceremony was chaired by the Deputy Minister of Health, Mrs. Karimou Fatoumazara, who also led a visit to an endemic locality and guaranteed the full support of the ministry of health to overcome the increase in cases detected mainly in Tillabery District. Other participants included Dr. Alhousseini Maiga of WHO/AFRO, representatives of UNICEF, US Peace Corps, Japan Overseas Cooperation Volunteers, The Carter Center/Global 2000, and a delegation from Mali's GWEP. The theme of the meeting was epidemiological surveillance in nomadic zones.

The Government of **Cote d'Ivoire** has named Dr. Brou AKA Noel as the new national program coordinator for the GWEP. He replaces Dr. Henri Boualou, who had led that program since 1991. Welcome, Dr. Aka, and Thank You, Dr. Boualou!

Ms. Kelly Callahan has joined the headquarters staff of Global 2000 at The Carter Center as assistant director of programs. She will report to Mr. Craig Withers, the director of program support. Ms. Callahan served most recently as The Carter Center's country representative, stationed in Nairobi, Kenya, for work with Operation Lifeline Sudan/South in southern Sudan. Welcome Kelly!

## DONATION FROM HENRY MCCONNON

Mr. Henry McConnon recently contributed \$469,000 to The Carter Center for its Guinea Worm Eradication activities. This is the 9<sup>th</sup> donation from Mr. McConnon, who has given more than \$2.5 million to the Center for the program since 1991.

## 2004 PROGRAM MANAGERS MEETING

This year's Meeting of Program Managers of Dracunculiasis Eradication Programs will be held in, Mali on during March 29 - April 1, 2004.

## RECENT PUBLICATIONS

Seim AR.2003. [Guinea worm almost eradicated]. [Norwegian] *Tidsskrift for Den Norske Laegeforening*. 123(16):2312-4, Aug 28.

Anosike JC. Azoro VA. Nwoke BEB. Keke RI. Okere AN. Oku EE. Ogbulie JN. Tony-Njoku RF. Okoro OU. Nwosu DC. 2003. Dracunculiasis in the north eastern border of Ebonyi State, south eastern Nigeria. [Article] *International Journal of Hygiene & Environmental Health*. 206(1):45-51.

Anosike JC. Nwoke BEB. Dozie L. Thofern UAR. Okere AN. Njoku-Tony R. Nwosu DC. Oguwuike UT. Dike MC. Alozie JI. Okugun GRA. Ajero CMU. Onyirioha CU. Ezike MN. Ogbusu FI. Ajayi EG. 2003. Control of endemic dracunculiasis in Ebonyi state, south-eastern Nigeria. *International Journal of Hygiene & Environmental Health*. 206(6):591-596.

*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. James H. Maguire, Director, 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>.*



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