



Date: April 13, 2001

From:



WHO Collaborating Center for
Research, Training and Eradication of Dracunculiasis

Subject:

GUINEA WORM WRAP-UP # 111

To: Addressees

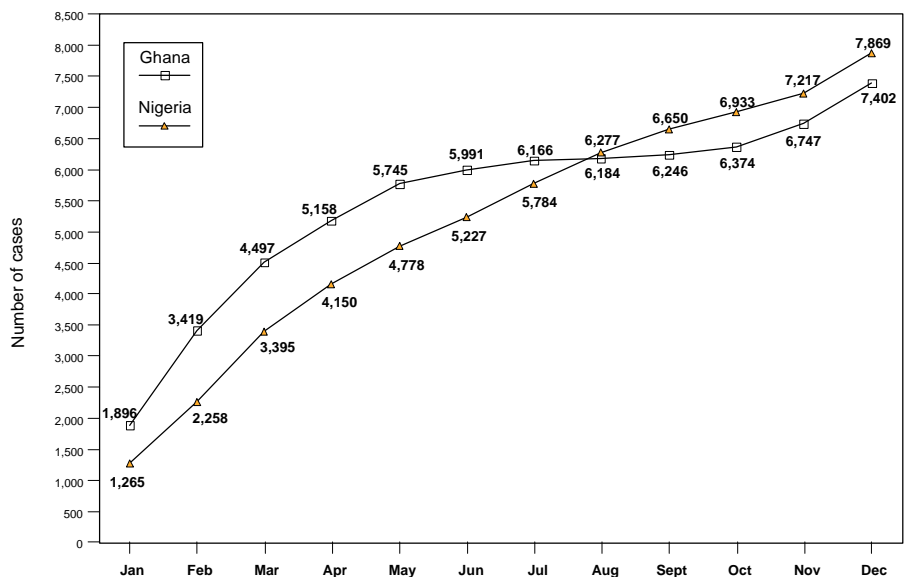
Detect Every Case (within 24 hours), Contain Every Worm (immediately)!

6th MEETING OF NATIONAL PROGRAM COORDINATORS CONVENES IN LOME, TOGO

About 200 participants convened at ECOWAS headquarters in Lome, Togo on March 26-29 for the Sixth Meeting of National Program Coordinators of Guinea Worm Eradication Programs. At the Opening Ceremony, Dr. Donald Hopkins, representative of The Carter Center, stressed the urgency of interrupting transmission of dracunculiasis in the remaining endemic countries outside of Sudan before financial support for that ends in December 2002. Former Nigerian head of state General (Dr.) Yakubu Gowon spoke of his advocacy for safe water and mobilization to engender attitudinal changes in affected Nigerians. He said it is incumbent on all to continue to help provide safe water to endemic communities. The minister of health, Professor K. Charles Agba, thanked WHO, UNICEF and The Carter Center, as well as former U.S. President Jimmy Carter, former Malian head of state General Amadou Toumani Toure, and General Gowon for their roles in the campaign. He reminded the audience that this is an *eradication* campaign, that the goal is within reach, and that we should not rest on our laurels. UNICEF's resident representative to Togo, speaking on behalf of WHO and UNICEF, summarized the results of the campaign so far. A highlight of the ceremony was the singing of two rousing *a capella* Guinea worm anthems by members of Togo's Guinea Worm Football Club. The National Program Coordinator of Togo's program, Mr. K. Ignace Amegbo, and his staff had decorated the conference room with numerous examples of illustrations used for health education, and inspirational banners.

Figure 1

Number of Cumulative Cases of Dracunculiasis Reported in Ghana and Nigeria: 2000



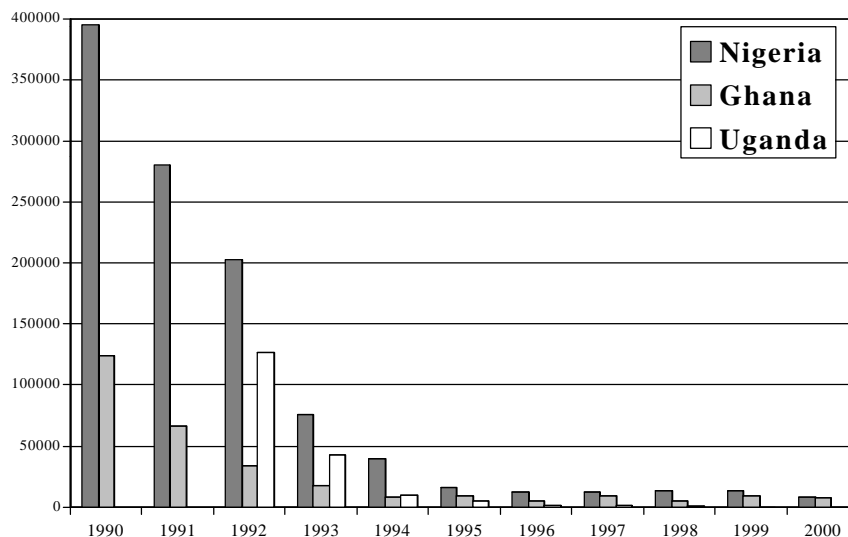
National Program Coordinators reported on the status of their Guinea Worm Eradication Programs, including several African countries in the pre-certification stage, and Yemen. The status of various indices as of the end of 2000 is given in Tables 1 and 5 and Figures 3 and 4. Some other highlights are given here. **Niger** and **Togo** have distributed filters house-to-house. **Mali** introduced a cash reward system for reporting of new cases (Niger will do so in 2001). **Ghana** suspended its reward system, and is beginning a “massive” water investment scheme intended to accelerate provision of safe water to endemic communities. **Benin** had only imported cases in two of its six formerly endemic departments last year. **Mauritania** is benefiting from borehole wells provided by the Japan International Cooperation Agency (JICA) in a project that began in 1999; the only case reported in Adrar last year was imported from another part of the country. **Ethiopia** reduced its indigenous cases by –78% in 2000 and increased its cash reward for reporting of a case. **Uganda**, which once reported the second-highest number of cases in the world, has now gone almost five successive months without a case. UNICEF helped get safe water to all endemic villages in Uganda’s Kitgum District and expects to complete coverage of endemic villages in Moroto and Kotido Districts in 2001. **Cote d’Ivoire** was constrained by late release of resources. **Burkina Faso** is routinely monitoring copepods to check the efficacy of teams treating water sources; Peace Corps Volunteers are active in 23 endemic villages. **Nigeria** is monitoring the status of key interventions each month. A WHO consultant to **Central African Republic**, Mr. Georges N’Diaye, led teams that surveyed 105 villages in southeastern border areas of that country. Although he saw no active cases of dracunculiasis himself, some of the national supervisors reportedly did. WHO and **Chad** believe that three suspect cases that were reported to have occurred in that country in August 1998 were authentic indigenous cases. **Sudan** is very close to breaking transmission in its northern states. The project assisted by Comitato Collaborazione Medica (CCM) in the Adior area of highly endemic Lakes (Buheirat) State in southern Sudan reduced the number of cases by 81% from the 4,322 reported in 1999 despite very high reporting rates in both years. Approximately 2,000 people are working on the project to prepare and distribute nine million pipe filters for personal use in Sudan this year. So far, one million pipe filters have been prepared. Several countries reported on their strong positive experiences in using female village volunteers.

Two working groups discussed ways to 1) improve surveillance and containment of cases, and 2) monitor and supervise intensified interventions more effectively. The work groups identified basic constraints and suggested specific solutions for each. It was agreed that surveillance must be active and should include as many methods as possible e.g., village volunteers, schools, markets, etc. Programs should try to get the members of endemic communities themselves to participate in surveillance and control measures, by helping them understand why it is in their own interest to do so. All interventions should be monitored monthly. Motivation of village volunteers especially is the key to better surveillance and to better implementation of interventions. Programs should be sure to meet their obligations to the village volunteers, by providing adequate training, supervision, supplies, and feedback, as well as distinctive t-shirts and “Guinea worm cloth”. More than one village volunteer may be necessary to cover a large village. The definition of case containment should be made available to Guinea worm workers in as many different ways as possible, e.g. laminated sheet or card, on village registers, etc. A third workgroup (countries in the pre-certification stage) discussed criteria and requirements for certification, as well as issues related to the introduction of reward systems and using NIDs to complement surveillance. A complete summary of the results of these three workgroups will be provided to each national program coordinator.

Endemic countries also reported on their results so far in 2001 (January-February). So far this year, Benin has reported the highest case containment rate (86%), while Cote d'Ivoire reported the lowest (33%). The low containment rate in Cote d'Ivoire elicited many comments and questions. The greatest reductions in cases so far were reported by Uganda (100%) and Benin (65%). Togo (50%) and Burkina Faso (18%) have reported significant increases in cases, while Ethiopia, Mauritania and Uganda have reported no cases thus far (Table 2). Mr. Amegbo, Dr. Alhousseini Maiga of WHO, and Dr. Ernesto Ruiz of The Carter Center participated in a press conference before the meeting began. The meeting and the dedication of new wells in endemic villages of Ogoou Prefecture (see story below) received extensive coverage on television and in other mass media.

Four new national program coordinators participated in this meeting for the first time in that capacity: Dr. Augustine Mada of Central African Republic, Mr. Tesfaye Gezahegn of Ethiopia, Dr. Andrew Seidu Korkor of Ghana, and Dr. Abderrhmane Ould Kharchi of Mauritania. General Gowon and other members of the Nigerian team drove from Lagos to Lome in a motorcade of 7 vehicles.

Figure 2 Number of Cases by Year: Nigeria, Ghana, and Uganda



TOGO DEDICATES NEW WELLS IN OGOU DISTRICT



On Friday, March 23, Togo's minister of health (Professor K. Charles Agba) and the minister of education (Mr. Kofi Sama) visited the endemic village of Ilama in Ogoou Prefecture to officially inaugurate two of the ten new borehole wells that were recently provided by The Carter Center/Global 2000. The ten wells were provided in nine of the highest endemic villages lacking safe water supply in the prefecture, according to the 1999 line-listing for Ogoou (see *Guinea Worm Wrap-Up #108*).

Ogoou is the highest endemic prefecture in Togo, reporting 384 (46%) of the country's 828 cases in 2000. **These nine villages reported 312, or 20% of Togo's 1,585 cases in 1999.** Representatives of all nine villages were present at the ceremony, as well as the acting Prefect of Ogoou, the national program coordinator (Mr. K. Ignace Amegbo), representatives of U.S. Peace Corps, and Dr. D. Hopkins, Dr. E. Ruiz, and Mr. C. Withers of The Carter Center/Global 2000. The wells have been operational since early November 2000.

Table 1

Number of cases contained and number reported by month during 2000*
(Countries arranged in descending order of cases in 1999)

COUNTRY	NUMBER OF CASES CONTAINED / NUMBER OF CASES REPORTED													TOTAL*	%
	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	CONT.		
SUDAN	511 / 1263	603 / 1033	511 / 900	563 / 1322	1951 / 6064	3305 / 8591	3421 / 7461	4008 / 8913	3702 / 9945	2846 / 5628	881 / 1943	841 / 1827	23143 / 54890	42	
NIGERIA	709 / 1265	451 / 993	651 / 1137	368 / 755	344 / 628	324 / 449	354 / 557	321 / 493	272 / 373	228 / 283	202 / 284	365 / 652	4589 / 7869	58	
GHANA	1737 / 1896	1214 / 1523	706 / 1078	450 / 661	485 / 596	201 / 237	94 / 125	30 / 68	19 / 62	125 / 128	296 / 373	539 / 655	5896 / 7402	80	
BURKINA FASO	8 / 24	5 / 10	33 / 62	103 / 179	220 / 318	249 / 316	193 / 280	186 / 271	99 / 122	95 / 125	128 / 137	6 / 14	1325 / 1858	71	
NIGER	1 / 1	2 / 2	0 / 0	2 / 3	23 / 39	67 / 106	116 / 177	187 / 363	148 / 223	108 / 146	40 / 63	28 / 43	722 / 1166	62	
TOGO	63 / 90	39 / 51	36 / 55	16 / 35	50 / 73	45 / 55	46 / 69	20 / 28	31 / 47	52 / 74	101 / 114	96 / 137	595 / 828	72	
BENIN	41 / 53	20 / 28	10 / 17	8 / 8	0 / 0	3 / 4	3 / 3	0 / 0	7 / 7	14 / 15	23 / 26	21 / 25	150 / 186	81	
COTE D'IVOIRE	25 / 26	63 / 69	15 / 42	5 / 32	6 / 13	16 / 38	12 / 21	23 / 27	8 / 8	6 / 6	5 / 6	0 / 9	184 / 297	62	
MALI	5 / 5	1 / 1	0 / 0	5 / 5	5 / 13	6 / 11	15 / 31	19 / 30	41 / 74	42 / 58	24 / 32	3 / 30	166 / 290	57	
UGANDA	4 / 4	2 / 2	3 / 4	11 / 11	14 / 16	10 / 10	12 / 24	8 / 15	4 / 4	4 / 5	0 / 0	1 / 1	73 / 96	76	
MAURITANIA	0 / 0	0 / 0	0 / 0	0 / 0	1 / 1	4 / 5	3 / 8	27 / 44	21 / 40	14 / 26	5 / 9	3 / 3	78 / 136	57	
ETHIOPIA	0 / 0	0 / 0	2 / 2	26 / 26	12 / 13	3 / 4	9 / 9	1 / 2	1 / 1	2 / 2	1 / 1	0 / 0	57 / 60	95	
C.A.R. ¹	0 / 11	0 / 8	0 / 1	0 / 0	0 / 1	0 / 9	0 / 4	0 / 0	0 / 0	0 / 0	0 / 0	0 / 1	0 / 35	0	
KENYA	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 1	0 / 0	1 / 1	0 / 0	1 / 1	0 / 1	4 / 4	100	
CAMEROON	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	1 / 1	0 / 0	2 / 2	0 / 0	0 / 0	3 / 3	100	
TOTAL*	3104 / 4638	2400 / 3720	1967 / 3298	1557 / 3037	3111 / 7775	4233 / 9835	4278 / 8770	4831 / 10255	4354 / 10907	3538 / 6498	1706 / 2988	1903 / 3397	36985 / 75120	49	
% CONTAINED	67	65	60	51	40	43	49	47	40	54	57	56	49		

* PROVISIONAL

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

¹ Two cases of dracunculiasis were imported from Sudan, one in January and another in December.

Table 2

**Number of cases contained and number reported by month during 2001*
(Countries arranged in descending order of cases in 2000)**

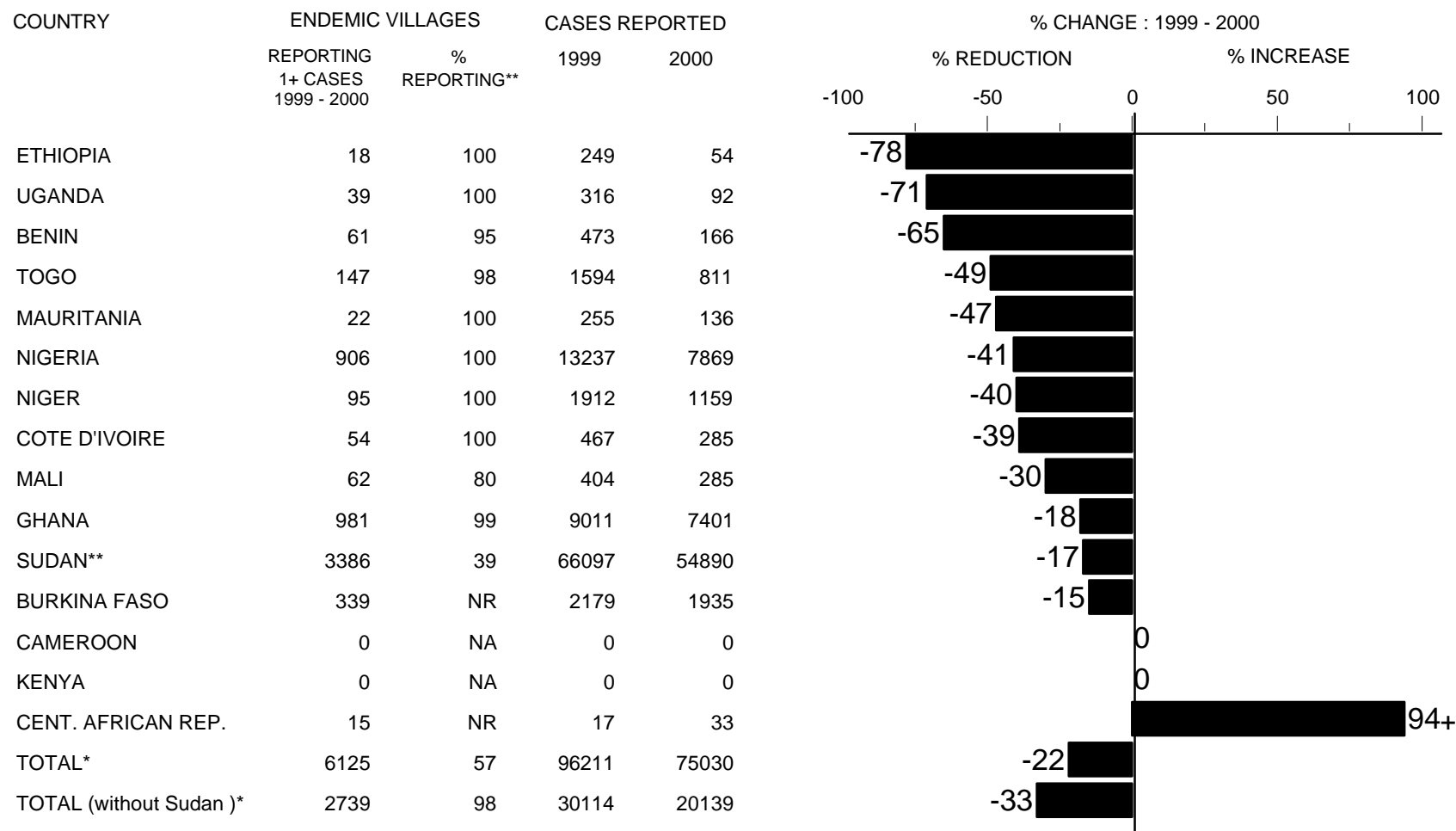
COUNTRY	NUMBER OF CASES CONTAINED / NUMBER OF CASES REPORTED													CONT.	%
	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL*		
SUDAN	741 / 2006	756 / 1406	/	/	/	/	/	/	/	/	/	/	1497 / 3412	44	
NIGERIA	673 / 1017	813 / 1029	423 / 730	/	/	/	/	/	/	/	/	/	1909 / 2776	69	
GHANA	622 / 844	672 / 917	/	/	/	/	/	/	/	/	/	/	1294 / 1761	73	
BURKINA FASO	17 / 19	20 / 20	/	/	/	/	/	/	/	/	/	/	37 / 39	95	
NIGER	1 / 2	2 / 2	0 / 0	/	/	/	/	/	/	/	/	/	3 / 4	75	
TOGO	109 / 120	57 / 91	/	/	/	/	/	/	/	/	/	/	166 / 211	79	
MALI	2 / 4	0 / 0	/	/	/	/	/	/	/	/	/	/	2 / 4	50	
COTE D'IVOIRE	17 / 38	18 / 58	3 / 18	/	/	/	/	/	/	/	/	/	38 / 114	33	
BENIN	12 / 16	13 / 13	/	/	/	/	/	/	/	/	/	/	25 / 29	86	
MAURITANIA	0 / 0	0 / 0	/	/	/	/	/	/	/	/	/	/	0 / 0		
UGANDA	0 / 0	0 / 0	/	/	/	/	/	/	/	/	/	/	0 / 0		
ETHIOPIA	0 / 0	0 / 0	0 / 0	/	/	/	/	/	/	/	/	/	0 / 0		
C.A.R.	/	/	/	/	/	/	/	/	/	/	/	/	0 / 0		
CHAD	/	/	/	/	/	/	/	/	/	/	/	/	0 / 0		
TOTAL*	2194 / 4066	2351 / 3536	426 / 748	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	4971 / 8350	60	
% CONTAINED	54	66	57										60		

* PROVISIONAL

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

Figure 3

Percentage of Endemic Villages Reporting and Percentage Change in Number of Indigenous Cases of Dracunculiasis During 1999 and 2000*, by Country



* provisional

** 2,600 (33%) of 7,898 endemic villages are not accessible to the program

Table 4

Dracunculiasis Eradication Campaign
Reported Importations and Exportations of Cases of Dracunculiasis: 2000

From	»»»	To	Month and number of cases imported												Number of caes exported	
			Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept	Oct.	Nov.	Dec.		Total
Ghana	»»»	Benin	3	2	4	0	0	1	0	0	0	0	0	1	11	Ghana = 27
Ghana	»»»	Cote d'Ivoire	0	0	0	0	3	3	0	0	0	0	0	0	6	
Ghana	»»»	Togo	0	3	1	0	0	3	1	1	1	0	0	0	10	
Burkina Faso	»»»	Cote d'Ivoire	1	0	0	0	1	1	0	0	1	0	1	1	6	Burkina Faso = 16
Burkina Faso	»»»	Mali	0	0	0	0	0	0	2	4	1	0	0	0	7	
Burkina Faso	»»»	Niger	0	0	0	0	1	0	0	0	2	0	0	0	3	
Sudan	»»»	CAR	1	0	0	0	0	0	0	0	0	0	0	1	2	Sudan = 16
Sudan	»»»	Ethiopia	0	0	0	0	0	1	3	0	1	0	0	1	6	
Sudan	»»»	Kenya	0	0	0	0	0	0	1	0	1	0	1	1	4	
Sudan	»»»	Uganda	0	0	0	0	0	2	1	0	0	0	0	1	4	
Nigeria	»»»	Ghana	0	0	0	0	0	0	0	0	0	0	0	1	1	Nigeria = 11
Nigeria	»»»	Cameroon	0	0	0	0	0	0	0	1	0	2	0	0	3	
Nigeria	»»»	Niger	0	0	0	0	3	0	0	0	0	0	0	0	3	
Nigeria	»»»	Togo	0	0	0	0	1	0	0	0	0	3	0	0	4	
Togo	»»»	Benin	3	1	0	0	0	1	2	0	0	0	0	2	9	Togo = 9
Benin	»»»	Togo	0	0	0	0	0	1	0	1	0	1	0	0	3	Benin = 3
Niger	»»»	Mali	0	0	0	0	0	0	1	0	0	0	0	0	1	Niger = 1
Mali	»»»	Niger	0	0	0	0	2	0	0	0	2	0	0	0	4	Mali = 6
Mali	»»»	Burkina Faso	0	0	0	0	2	0	0	0	0	0	0	0	2	
Cote d'Ivoire	»»»	Burkina Faso	0	0	0	0	0	1	0	0	0	0	0	0	1	Cote d'Ivoire = 1
Total			8	6	5	0	13	14	11	7	9	6	2	9	90	

Table 5

**Reported cases of dracunculiasis and villages reporting one or more cases during 2000,
and status of key interventions as of December 31, 2000**

Country	Dracunculiasis Cases in 2000			Endemic Villages in 2000				
	Total #	# Contained (%)	# Internationally Imported***	Total #	# only 1 case	% all h/h Filters	%Abate	% Safe Water
Nigeria	7,869	4,589 (58%)	0	906	201	88%	54%	50%
Ghana	7,402	5,905 (80%)	1	981	299	83%	80%	47%
Burkina Faso	1,858	1,319 (69%)	3	339	111	90%	17%	86%
Niger	1,166	729 (63%)	10	95	27	95%	64%	54%
Togo	828	595 (71%)	17	147	40	78%	77%	50%
Mali	290	166 (57%)	8	62	23	100%	39%	30%
Cote d'Ivoire	297	184 (62%)	12	54	34	100%	100%	81%
Benin	186	150 (80%)	20	63	35	100%	48%	67%
Mauritania	136	78 (57%)	0	22	9	100%	36%	73%
Uganda	96	76 (79%)	4	39	33	100%	96%	65%
Ethiopia	60	57 (95%)	6	18	11	100%	26%	44%
C.A.R. *	32		2	15				
Sudan **	75,120	23,143 (42%)	0	3,386	?	28%	3%	45%
Total***	95,340	36988 (49%)	83	6,127	823			

* 3 of the 35 cases reported by Central African Republic as Guinea worm disease were confirmed to be onchocerciasis. Two cases of dracunculiasis were imported from Sudan, one in January and another in December.

** Another 2,600 villages are suspected to be endemic but are not accessible to the program

*** 7 additional cases (3 imported into Cameroon and 4 into Kenya) are not shown

GHANA HOLDS MID-YEAR REVIEW; CASES CONTINUE TO DECLINE



The Ghana Guinea Worm Eradication Program convened a mid-year review of the program at Ho, in Volta Region on March 19-20. The meeting was opened by the regional minister for Volta Region, Mr. Owusu-Yeboah. The Keynote Address was delivered by Dr. George Amofah, deputy director, public health in the national ministry of health. Dr. Amofah remarked on the urgency of eradicating Guinea worm disease in Ghana, as stated by the new head of state in his parliamentary address, and by the new minister of health. Dr. Amofah also made clear his own determination to ensure that the program is not conducted as “business as usual” in this final eradication phase. Carter Center associate executive director Dr. Donald Hopkins reviewed the status of the global campaign. The national program coordinator, Dr. Andrew Seidu Korkor summarized the status of the Ghana program, followed by presentations by the Guinea worm coordinators for each of the ten regions.

Recent achievements since the previous national review was held in Tamale, Northern Region in September 2000 (see *Guinea Worm Wrap-Up #106*) include formation of an Interagency Coordinating Committee (ICC) at the national level. The ICC has met five times since November 2000 and it has already improved collaboration between the ministry of health and other government agencies, especially the water sector. Since September 2000, the percentage of Ghana’s endemic villages with filters in all households has increased from 70% to 83%, and the percentage of eligible ponds treated with Abate has increased from 63% to 83%. The reported rate of case containment increased from 61% in 1999 to 80% in 2000. The number of reported cases declined by –18% between 1999 and 2000, while the number of known endemic villages rose 5% from 934 to 981 (301 of the latter reported only one case each). Cases in January-February 2001 are down –48% from the same period of 2000. In Volta Region, which increased its case containment rate from 42% to 70% since the September 2000 review, the highest endemic district of Kete-Krachi is achieving substantial reductions in cases. Monthly monitoring of interventions has improved, especially in the Northern Region. Greater Accra, Upper East, and Western Regions reported zero indigenous cases throughout 2000.

Important remaining weaknesses that were discussed at the meeting include inadequate filter coverage in Northern Region’s Nanumba District (77% of endemic villages there have filters in all households), surveillance that is frequently passive, and weak supervision and motivation of zonal and village level workers in the program. The program is aiming to increase filter coverage to 100% and case containment to at least 90% in 2001. A “Worm Week” is planned for October 6-13, 2001 in Nanumba District, with the support of the regional ministry of health and U.S. Peace Corps, as well as in Atebubu District of Brong-Ahafo Region. The mid-year review was attended by about 100 persons, including personnel from the national and regional ministries of health, representatives of the Community Water and Sanitation Agency, The Carter Center, UNICEF, WHO, and U.S. Peace Corps.

NIGERIA CELEBRATES NATIONAL GUINEA WORM ERADICATION DAY; NORTHEAST ZONE HAS ZERO CASES IN FEBRUARY



The governor, Dr. Sam Ominvi Egbu; members of the Ebonyi State executive council; and other authorities of Nigeria’s Ebonyi State Government hosted members of Nigeria’s Guinea Worm Eradication Program (NIGEP); former Nigerian head of

state General (Dr.) Yakubu Gowon; federal minister of state for health Dr. (Mrs.) Amina Ndalolo; chairmen of several Local Government Areas (LGA), traditional rulers of the ten most endemic villages in the state, representatives of donor agencies, and many others in a gala celebration of Nigeria's National Guinea Worm Eradication Day at Unity Square in the state capital of Abakaliki on Tuesday, March 20, 2001. The theme of this year's celebration was LET'S END IT NOW! Ebonyi State is the highest endemic state in Nigeria, accounting for 35% of the country's cases in 2000. Participants were welcomed by the state commissioner for health. The national coordinator Dr. K.A. Ojodu, gave an overview of the national program. General Gowon, the governor and the federal state minister for health gave a press conference, and then led a visit to the most endemic village of Onu-Ebeta of Effium Community in Ohaukwu LGA. Representatives of some of the Nigerian ministry of health's major partners, including The Carter Center, UNICEF, the Yakubu Gowon Center and WHO also participated in the celebration.

The Northeast Zone of Nigeria reported zero cases for the entire month of February 2001! This is the first of the four NIGEP zones to attain this significant milestone. Congratulations to zonal facilitator Dr. James Balam and Global 2000 consultant Mr. Joshua Ologe and their colleagues!!!! Nigeria reported only 417 more cases than Ghana in 2000 (figure 1). *Editorial Note: As of March 2001, Nigeria still has not reaped the benefits of the \$200,000 that was awarded by the United Nations Foundation to UNICEF/Nigeria before January 2000 for providing safe water supplies to priority endemic villages in Nigeria. Delivery of safe water to the 10-20 highest priority endemic villages with these resources is urgently needed to assist the program at this critical final stage of the program.*

IN BRIEF:

Chad: The Dracunculiasis Eradication Unit at WHO/Geneva reports that an evaluation conducted in Chad during February 2001 revealed that 3 alleged cases of dracunculiasis were reported from the village of Oueleye, Guera Prefecture during August and September 2000. Reportedly, all three cases were detected by village health workers and confirmed by their supervisor and all were contained. Because the area becomes isolated during the rainy season (May – September), the cases were not reported until October 2000.

Editorial: Ouelaye is one of 4 endemic villages for Melfi subprefecture, in Guera prefecture that reported 288 combined cases in 1993, 150 in 1994, 7 in 1995, and zero cases in 1996, 1997, 1998, and 1999. The claim that 3 alleged cases of dracunculiasis suddenly appeared in this village during 2000, after 4 years without known transmission is surprising. No evidence about possible chains of transmission prior to 2000 is known at this time. This episode is not included in Chad's official report for 2000 presented during the recent meeting of Program Managers in Lome, Togo (see page 1). However, the Chad Guinea Worm Eradication Program, with assistance from WHO, is taking steps to intensify surveillance for dracunculiasis in Guera and other formerly endemic areas this year.

Ethiopia held the annual national review meeting of its Dracunculiasis Eradication Program in Addis Ababa on January 22-23. The Opening Session included addresses by representatives of UNICEF, The Carter Center, and the ministry of health. The Guinea Worm Stations that were established in South Omo in 1999 are believed to be responsible for much of the reductions in cases over the last year. Participants at the review meeting agreed to establish a National Certification Commission (for Guinea worm eradication) in mid-2001, to double the reward amount to Birr 100 (~US\$12) in South Omo effective February 1, 2001,

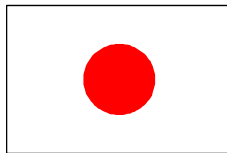
to establish a national reward of Birr 500 (300 for the case and 200 for the reporter) in non-endemic areas, and to include reporting of Guinea worm disease in the questionnaire for [polio] National Immunization Days and for polio Acute Flaccid Paralysis (AFP) surveillance. Ethiopia has reported only 5 indigenous cases of dracunculiasis in the last eight months (August 2000-March 2001).

Uganda has increased its reward for reporting of a case of dracunculiasis to 50,000 Ugandan shillings (~US\$29).

Benin: We regret to report the death of Mr. Celestin ASSINOU, who was a driver for the Guinea Worm Eradication Program of Benin since the beginning of the program in 1990. He was 43 years old.

Sudan: A recent grant for \$255,000 from the UN Foundation for Guinea worm eradication activities in OLS-South assisted areas, i.e., Rumbek County, Lakes State, Yambio County, Western Equatoria State, and Atar District of south Sudan. This support will provide 150,000 cloth filters, 50,000 "pipe filters", 173 bicycles, 173 pairs off gum boots for village volunteers, medical kits and replacement components, health education materials, stipends for district coordinators, and for transporting these supplies to these focus areas.

JAPAN CONTINUES SUPPORT FOR SUDAN

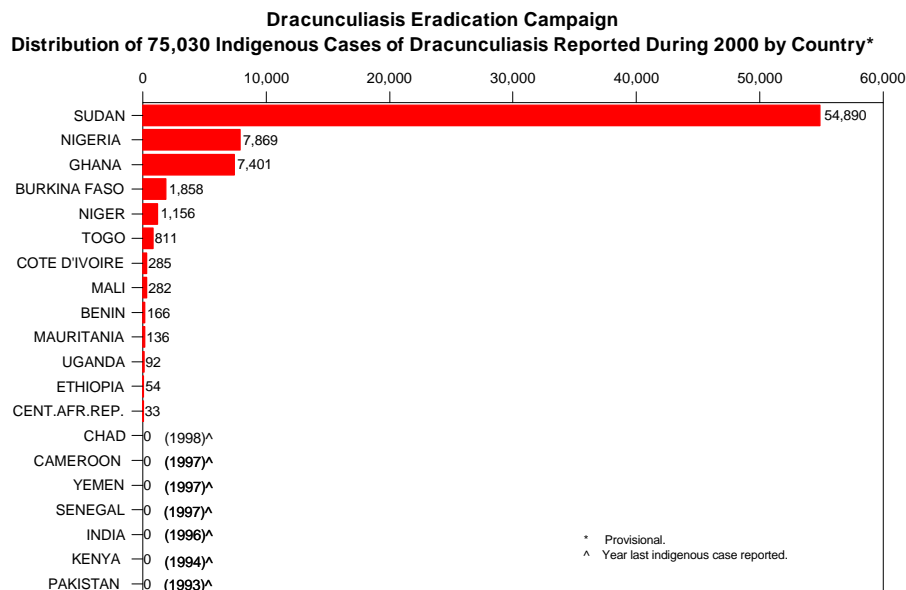


JAPAN

The Embassy of Japan in Khartoum has informed The Carter Center of a donation of \$150,000 for the Guinea Worm Eradication Program of Sudan. This award is made under the embassy's Grant Assistance for Grassroots Projects program, and will be used to purchase filter material for endemic areas served by the Government of Sudan and by Operation Lifeline Sudan / Southern Sector. The embassy made a similar grant of \$150,000 to the program in June 1999. Since 1991, Japan has been the

largest donor of international development assistance. Japan has been a key supporter of the global campaign to eradicate dracunculiasis, including the provision of safe water in endemic villages. In addition to support provided through the Carter Center, Japan has provided wells and vehicles for the national programs in many countries as well as hands on support through the Japan Overseas Cooperation Volunteers.

Figure 4



I was very discouraged to see [that] the women we approached [did] not know how to filter properly. This was especially true when it came to removal of the filters from the pots, and in one case the woman turned the filter over immediately after filtering and rinsed all of the Cyclops straight back into her water pot which she was about to drink out of! She was the wife of the Village Volunteer and when we asked him about it, he replied that he has his own filter! We explained the importance of taking time to teach the women the correct method of filtering water. From a consultant's report.

RECENT PUBLICATIONS

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DEFINITION OF CASE CONTAINMENT

A case of Guinea worm disease is contained if all of the following conditions are met:

1. The patient is detected before or within 24 hours of worm emergence; and
2. The patient has not entered any water source since the worm emerged; and
3. The village volunteer has properly managed the case, by cleaning and bandaging until the worm is fully removed, and by giving health education to discourage the patient from contaminating any water source (if two or more emerging worms are present, the case is not contained until the last worm is pulled out); and
4. The case is verified by a supervisor within 7 days of worm emergence (to confirm that the case is Guinea worm, and that it has been properly contained).

*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. Daniel Colley, Acting 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) 488-4532. The GW Wrap-Up web location has changed to <http://www.cdc.gov/ncidod/dpd/parasites/guineaworm/default.htm>



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