

DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service Centers for Disease Control and Prevention (CDC)

Memorandum

Date: October 19, 1999

From:

Subject:

WHO Collaborating Center for Research, Training and Eradication of Dracunculiasis

GUINEA WORM WRAP-UP # 95

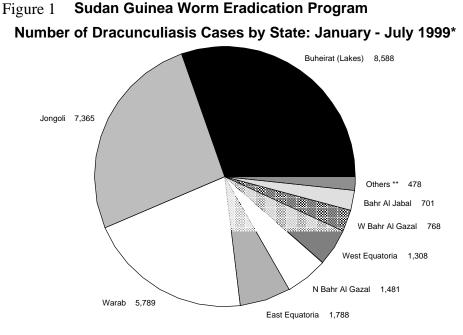
To: Addressees

# **Detect Every Case, Contain Every Worm!**

### PROGRAM REVIEW FOR ETHIOPIA, SUDAN & UGANDA HELD IN NAIROBI

The annual Program Review of the Guinea Worm Eradication Programs of Ethiopia, Sudan and Uganda was held at the Nairobi Safari Hotel in Nairobi, Kenya on September 28<sup>th</sup>-30<sup>th</sup>. Over 60 persons attended, including delegations from Sudan, Ethiopia, and Uganda, as well as representatives of The Carter Center, UNICEF, CDC, WHO, and 20 (of the 22-25 involved) Non-governmental Organizations (NGOs). The meeting also heard a brief update of the status of surveillance for dracunculiasis in Kenya. Recommendations from the meeting for Ethiopia, Sudan and Uganda are given on pages 4 and 5.

With 29,086 cases through July, Sudan has reported 64% of the global total of cases so far this year. The distribution of Sudanese cases reported in 1999 by state is summarized in Figure 1. This is an increase of 31% from the number of cases reported by Sudan for the same period of 1998. (The average rate of monthly reporting in Sudan was 36% in 1998 and 41% so far in 1999.) Although about 42% of households in 6,707 known endemic villages throughout Sudan have cloth filters, which are still in inadequate supply, only 18% of endemic villages have filters in 100% of their households. The status of all key interventions in Sudan is shown in Figure 2.

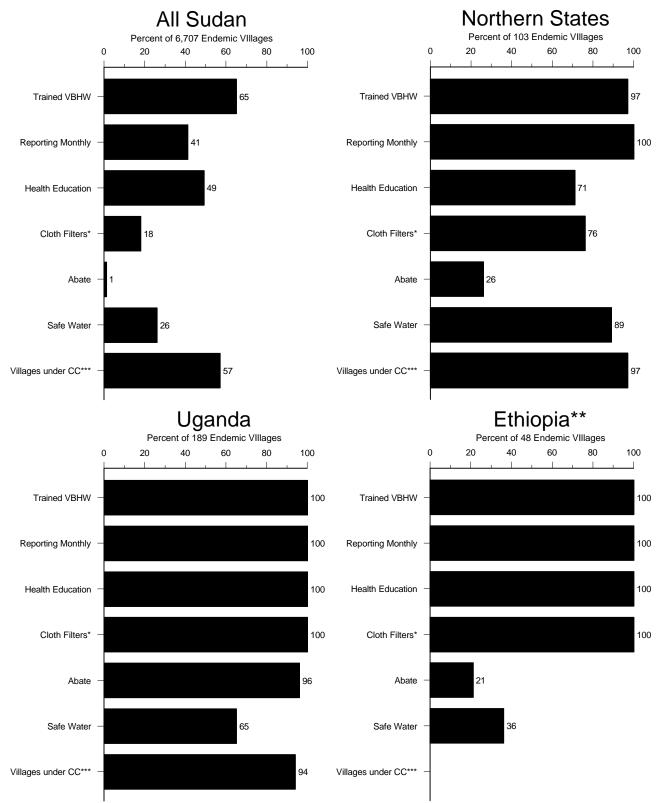


\* provisional

\*\* Others - Unity, Upper Nile, W Kordofan, N Darfur, Sinnar, S Kordofan

### Figure 2

# Sudan Guinea Worm Eradication Program Status of Interventions: September 1999



\* 100% households with cloth filters \*\* excluding Akobo & Naita

\*\*\* cc - case containment

Increased evacuations of non-governmental organizations (NGOs) have hurt activities in several highly endemic areas this year, especially in Jongoli, Northern and Western Bahr Al-Ghazal, Warab, and Eastern Equatoria States. So far in 1999, there have been 71 incidents requiring evacuations of NGO staff, compared to 48 evacuations in all of 1998. Of the approximately 6,600 known endemic villages in southern Sudan, about 2,000 are not being served due to insecurity, and about 2,500 of the remainder are not receiving 100% of needed supplies (filter material, first aid kits, etc.) because of limited funding. Abate usage and data regarding the status of safe water supply are improving, however.

The northern states of Sudan, which established a goal of halting transmission of dracunculiasis by the end of 1999, and which are all covered by the Federal Ministry of Health, are getting close to achieving that milestone. Ten of the 16 northern states were recently endemic, but of those, Northern Kordofan and Gazira have eliminated the disease already, and White Nile, Northern Darfur, and Khartoum States have reported only imported cases so far this year. The endemic northern states have reduced cases by 62% from January-July 1998 to January-July 1999 (from 349 to 132 cases), and 63 of the 132 cases were imported from southern states. Of the 132 cases reported in 1999, 95 (72%) were contained. The status of interventions in the northern states is summarized in Figure 2. A major concern now in the northern states is that the program still does not have access to the Nuba Mountains area of Southern Kordofan State. That area was known to be highly endemic when it was last surveyed for UNICEF in the mid-1980s. Parts of Blue Nile State have also not been surveyed adequately because of insecurity.

<u>Dr. Nabil Aziz Mikhail</u>, the national program coordinator; and <u>Dr. Abdel Karim A. El Faki</u>, Director General, Preventive and Social Medicine, represented the Sudanese Federal Ministry of Health at the Program Review. The Sudan Relief and Rehabilitation Association (SRRA) was represented <u>by Dr. Bellario Ahoy Ngong</u>, medical coordinator; and the Relief Association of South Sudan (RASS) was represented by <u>Dr. Thomas Dut Kek</u>, RASS Guinea worm coordinator, and <u>Dr. Felix Lado</u>, medical coordinator. A biannual GW Coordination Workshop for NGO field staff implementing the program in OLS-accessed areas will be held at Lokichokio, Kenya in November 1999 to discuss implementation issues and objectives for year 2000. The next coordination meeting for the SGWEP will be held in Khartoum December 6-7, 1999.

**UGANDA** has reduced its cases by 62% (from 731 to 284), and its endemic villages by 36% (from 152 to 98) between January-August 1998 and the same period this year. Ninety-four percent (94%) of this year's cases were contained (compared to 79% last year), and cash rewards for reporting a case are now being offered nationwide. 218 cases have been rewarded so far this year (Table 1, Figure 5). Some local authorities in Kitgum District are fining persons found entering water sources with emerging Guinea worms. Insecurity is still a problem in part of the endemic area. The Government of Uganda has included the UGWEP as a national priority in its Five-Year Plan. The national pre-certification steering committee is scheduled to meet for the second time on February 18, 2000. This program had not yet secured funding for 2000. <u>Dr. J.B.</u> <u>Rwakimari</u>, the national program coordinator, presented this report.

**ETHIOPIA** has reduced its cases by 35% (from 346 to 225) and its endemic villages by 33% (from 46 to 31) so far this year. Ninety-eight percent (98%) of this year's cases were contained (Table 1, Figure 5). The status of interventions is summarized in Figure 2. A severe drought in South Omo (which reported 91% of this year's cases) may have helped to limit transmission drastically this year. The two health promoters sent to Naita by the Ethiopian program are working collaboratively with health workers from the Diocese of Torit NGO based in Eastern Equatoria State of southern Sudan. A survey of previously inaccessible areas of Akobo district in Gambella Region is also underway. Staff of the two regional health bureaus concerned are increasingly involved in the program, but neither the ministry of health nor any other external partner appears ready to support the secretariat of this program when Global 2000 withdraws. Dr. Desta Alamirew, the national program coordinator, presented this report.

#### CONGRATULATIONS TO DR. JEREMIAH NGONDI !!!!

We extend our heartiest congratulations to <u>Dr. Jeremiah Ngondi</u> of The Carter Center/Global 2000 office in Nairobi. Dr. Ngondi has worked diligently as data manager for the Guinea Worm Eradication activity of that office for the past four years, while completing his undergraduate medical education. He graduated from the University of Nairobi medical school in early September. Dr. Ngondi hopes to arrange to serve his compulsory internship in Nairobi, so that he can continue his superb service as data manager during that time. Bravo Jeremiah! And thanks for your great work!

#### SUDAN RECOMMENDATIONS: COORDINATION/REVIEW MEETING SEPTEMBER 28-29, 1999

- 1. The SGWEP should continue to increase the use of Abate, with proper health education, in all appropriate endemic villages.
- 2. The SGWEP should explore possibilities for smaller capacity containers for Abate to allow for easier storage and greater mobility for workers who carry Abate.
- 3. The SGWEP and UNICEF/WES, especially in OLS/S, should continue to develop a common database to facilitate identification of endemic villages needing water point rehabilitation and provision of safe water.
- 4. The SGWEP should share information on endemic villages and on the status of water points with water agencies and promote intensified efforts to rehabilitate and provide safe water to endemic villages.
- 5. The SGWEP should continue working to interrupt transmission in the ten northern states and in selected stable endemic areas in the southern states. These areas should be prioritized for assistance.
- 6. All possible channels should be explored in order to investigate the status of Guinea worm disease in the Nuba Mountains area, which was known to be highly endemic about 15 years ago.
- 7. The SGWEP should identify operational problems in Unity, Upper Nile and Jongoli States and identify the best possible solutions.
- 8. The SGWEP should seek to work with the Federal Ministry of Health and the OLS implementing partner agencies to clarify needs for implementing the Guinea Worm Program. This discussion should identify unmet needs so that the agencies can help meet them.
- 9. The SGWEP should continue to increase the number of women village volunteers in the program.
- 10. The humanitarian agencies (SRRA and RASS) should issue a statement that communities wishing to be free of Guinea worm disease should commit to identify and support village volunteers who can then be provided, to the extent possible, with technical resources from the program to assist that commitment.
- 11. The SGWEP program should consider using the Onchocerciasis program model of a contract between the program and the endemic villages. The contract should specify the obligation of the program (supplies, training, supervision) and the endemic village (preventing any active case from contaminating drinking water sources, support for the village volunteer, monthly case reports and proper use of filters).
- 12. The SGWEP, NGOs and other partners (including SRRA and RASS) need to be more involved in community mobilization, through Village Development Committees/Village Health Committees, for Guinea worm disease eradication and maintenance of water points. This should help with village volunteer retention and sustainability of safe water.
- 13. The SGWEP should investigate provision of supplies by road through Uganda as a way to reduce air transport shipping costs.

#### ETHIOPIA RECOMMENDATIONS: COORDINATION/REVIEW MEETING SEPTEMBER 28-29, 1999

- 1. EDEP should support supervision at all levels from the center to district and the village, which should be regular and intensive.
- 2. The Reward Money should be increased before the next transmission season in order to increase surveillance sensitivity.

- 3. Intensive advocacy for increased awareness for political commitment and support to Guinea Worm Eradication Program should be carried out at all levels.
- 4. The Government of Ethiopia needs to provide greater support for its Dracunculiasis Eradication Program for active supervision of field activities.
- 5. EDEP should isolate suspected Guinea Worm patients in South Omo beginning at the blister stage, whenever possible.
- 6. The steering committee of the EDEP should meet quarterly on a regular basis.
- 7. EDEP should assign a full time regional or zonal coordinator as appropriate to supervise the implementation of program activities.
- 8. EDEP should include Guinea Worm cases reported from the Naita and Akobo areas of Ethiopia in the national figures.
- 9. EDEP should involve children (boys and girls) not only as beneficiaries of health education, but also promoters of Guinea Worm eradication effort.
- 10. EDEP needs to have its National program coordinator spend at least 25% of his time on this disease in the coming 12 months beginning immediately, and visit the field most peripheral level at least every 2 months.
- 11. EDEP should seriously consider ways of maintaining key staff in the program until certification is achieved.

#### UGANDA RECOMMENDATIONS: COORDINATION/REVIEW MEETING SEPTEMBER 28-30TH, 1999

1. The Uganda Guinea Worm Eradication Program should consider increasing the amount of the reward in order to find all new cases and ensure 100% case containment.

#### NIGERIA: TURNING THE TIDE?

The Nigerian Guinea Worm Eradication Program (NIGEP) has reported 892 and 516 cases in August and September 1999 – a reduction of 25% and 22% respectively, compared to the 1,197 and 659 cases reported in the same two months of 1998 (Figure 3). The percentage changes for the four zones for these two months are: NE Zone -23%, SW Zone -19%, SE Zone -2%, NW Zone +31%.

The Federal Ministry of Health has named four new Zonal Program Coordinators for NIGEP. They are: <u>Dr. James Balami</u> (NE Zone), <u>Mr. F.O. Oyediran</u> (NW Zone), <u>Mr. Anthony E. Okon</u> (SE Zone), and <u>Mr. Tunde Tokoya</u> (SW Zone. Global 2000/The Carter Center will continue to support a full-time consultant and staff for each zone. These Global 2000 Zonal Consultants are <u>Mr. Joshua Ologe</u> (NE Zone), <u>Prof. Luke Edungbola</u> (NW Zone), <u>Mrs Chinyere U. Maduka</u> (SE Zone), and <u>Dr. Fola Osibogun</u> (SW Zone). The office of the SE Zone has been moved to Enugu in order to be closer to the main remaining endemic area of that zone.

In September, <u>General (Dr.) Yakubu Gowon</u> paid first time visits to Ogun, Cross River, and Benue States, and revisited Oyo and Ebonyi States. The visits to Oyo and Ogun States were on September 13-16; he visited Benue, Cross River and Ebonyi States on 20-25 September. General Gowon also visited Katsina and Zamfara States in NW Zone on October 4-9. General Gowon's remarks in the Hausa language while in Katsina were broadcast by the BBC and heard by the Minister of Health of Niger, in Niamey.



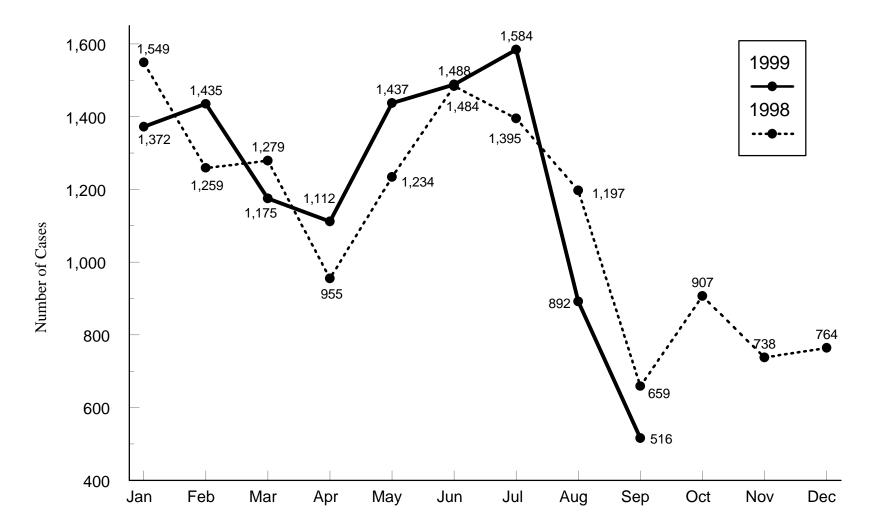


Figure 3

#### GENERAL TOURE AND PRESIDENT CARTER CONFER IN MALI

While visiting Mali to attend a Sasakawa - Global 2000 agriculture workshop, on October 14th former U.S. <u>President and Mrs.</u> <u>Jimmy Carter</u> joined former Malian head of state <u>General and Mrs. Amadou Toumani Toure</u> in a presentation on the status of Mali's Guinea Worm Eradication Program, followed by a dinner, at the Grand Hotel in Bamako. Both expressed their satisfaction with the progress of the Malian program so far, and the need for intensive focus in the final phase in order to ensure that Mali achieves its target to stop transmission by December 2000. Also attending the presentation and dinner were the <u>Minister of Health, Mme. Diakite F. N'Diaye</u>; the ministers of Finance and of Primary Education; the national program coordinator, <u>Dr. Issa Degoga</u>; resident representatives of Global 2000 (<u>Mr. Brad Barker</u>), USAID, UNICEF, WHO, UNDP, the director of the Malian Volunteer Corps, and U.S. Peace Corps, among others.

Mali has reported 252 cases in January - August 1999; this is a reduction of 28% compared to the same period of 1998 and includes half of the peak transmission season (June - October). Sixty-five percent of this year's cases were contained (Table 1, Figure 5). Relative to last year, Kayes, Timbuktu and Mopti Regions have reduced cases by 89%, 73%, and 18% respectively, while Gao reported an increase of 1%. Seventy-six percent of this year's cases were reported from Ansongo District in Gao Region (72 cases), and from Koro (60 cases) and Douentza (59 cases) Districts in Mopti Region (Figure 4). So far this year, 82 villages have reported one or more cases, compared to 154 villages in all of 1998.

#### NIGER: 93% OF CASES IN 5 DISTRICTS

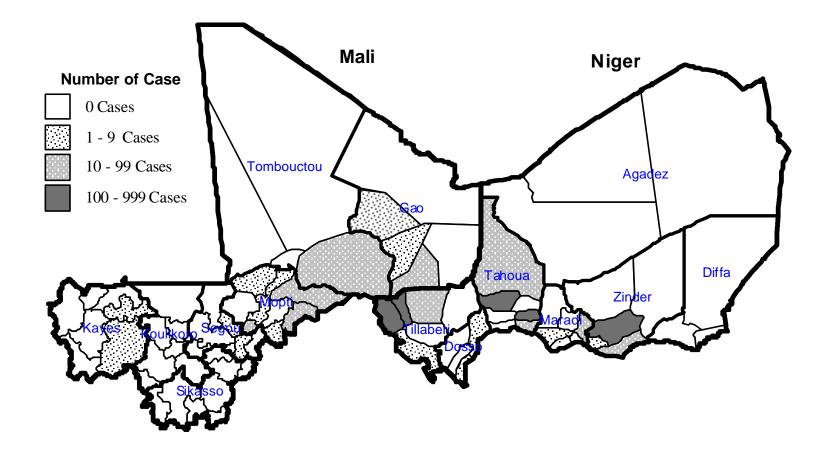
Niger has reported 1,651 cases of dracunculiasis in January - September 1999 - a reduction of 29% from the same period of 1998. Ninety-three percent of this year's cases so far were reported from only 5 districts: 38% in Mirriah (Zinder Region), 32% in Tera (Tillabery), 8% in Tillabery (Tillabery), 8% in Tahoua (Tahoua) and 7% in Bouza (Tahoua). A total of 175 villages have reported one or more cases so far this year, which is a reduction of 38% from the 282 villages that reported a case in all of 1998. Only 49% of the 328 cases reported in September were contained. The program supported by the Government of Japan to provide 90 new wells and rehabilitate 77 wells in Mirriah District will be completed by March 2000. The Carter Center, UNICEF, U.S. Peace Corps and WHO have all pledged to intensify their support for the program in 2000. U.S. Peace Corps has provided 2 full-time volunteers and over \$14,000 in funding for social mobilization and health education activities for this program so far in 1999. The annual meeting of the national Guinea Worm Eradication Program will be held in Tahoua, during November 16-18, 1999.

#### **IN BRIEF**

<u>Cameroon.</u> The Nigerian Guinea Worm Eradication Program reported that one male case-patient from Cameroon (a Shaw-Arab cattle herder) was detected in Borno State (Banki Town), Nigeria (where he was selling cattle) in July 1999. The patient's single Guinea Worm was manually extracted during his stay in Banki Town. This man claimed to be a resident of Guidiguis, Mayo Danai, Cameroon, and not to have traveled outside Cameroon during 1998 (he did admit to having traveled to Chad during 1997). This case suggests there may have been transmission of dracunculiasis in Cameroon during 1998. <u>Dr.</u> <u>Dama Mana</u>, the national coordinator of Cameroon, is currently investigating the possible source of this case.

<u>Chad.</u> <u>Dr. Gagde Hienn-Dandje</u>, Chad's national coordinator, reports one male case- patient was detected in the village of Mandelia (canton Madiago), sub-prefecture of rural N'Djamena, Chari Baguirmy Province. According to Dr. Gagde, between July 28 and September 28, 1999 a total of 7 Guinea worms emerged from this patient. Neither the village of residence of this man, Tchire Ayba nor Mandelia are in areas of Chad known to have had transmission of dracunculiasis during the past years. The patient did admit to having traveled to Banki Town, Bama LGA, Borno State, Nigeria in May 1998 to farm with his brother in a place called Bembem (a farming hamlet), located about 2 kilometers from Banki Town. In November 1998, both brothers went to the village of Hollom, Department of Logone, Extreme North Province, Cameroon (one half of Hollom village is in Cameroon and the other half is in Chad). In February 1999 they left Hollom and went to Tchire Ayba, and in May 1999 the case-patient went to Mandelia where the onset of dracunculiasis occurred. Since, transmission of dracunculiasis is endemic in Bama LGA, including the area where this man farmed, it is likely that the infection occurred there. Dr. Gagde has declared this case to have been imported from Nigeria. It has now been one full year since the last indigenous case of dracunculiasis from Chad was reported (September 1998) from An-Timan , in Salamat.

Figure 4 Distribution of 254 cases of Dracunculiasis reported from Mali (Jan. - Aug., 1999) and of 1,651 cases reported from Niger (Jan - Sept. 1999)



## Number of cases contained and number reported by month during 1999\* (Countries arranged in descending order of cases in 1998)

COUNTRY		NUMBER OF CASES CONTAINED / NUMBER OF CASES REPORTED												
	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL*	CONT.
SUDAN	1333 / 2742	1640 / 3261	1516 / 2945	1622 / 3165	3374 / 6224	3525 / 7119	1867 / 3630	/	1	1	/	7	14877 / 29086	51
NIGERIA	585 / 1372	755 / 1435	945 / 1175	874 / 1112	1148 / 1437	1137 / 1488	780 / 1584	495 / 892	330 / 516	1	1	/	7049 / 11011	64
GHANA	921	616 / 1139	546 / 1000	450 / 771	378 / 650	231 / 412	1384 124 / 214	54 / 83	/	1	/	7	3320 / 5409	61
	2 /	3 /	2 / 2	6 / 6	35 /	156	215	197 /	161 / 328	1	/	/	777	
NIGER BURKINA FASO	2	3 3 / 3	63 / 108	18 / 55	45 84 / 240	300 211 / 596	480 222 / 489	485 116 / 185	328 43 / 102	1	/	7	1651 761 / 1779	47
TOGO	87 / 102	58 / 85	108 17 / 31	32 / 34	48 / 71	60 / 73	489 53 / 101	53 / 122	90 / 130	1	1	/	498 / 749	43
COTE D'IVOIRE	40 / 55	28 / 44	38 / 40	28 / 41	33 / 42	62 / 85	36 / 43	20 / 27	17 17 17	1	1	/	302 / 394	77
UGANDA	3 / 6	7 / 7	7 / 7	20 / 21	66 / 70	99 / 102	36 / 39	31 / 32	13 / 13	1	/	7	282 / 297	95
BENIN	84 / 89	22 / 27	14 / 15	9 / 10	11 / 12	2 / 3	4 / 4	3 / 3	8 / 9	1	/	7	157 / 172	91
MALI	1 / 2	2	3 / 3	2 / 2	11 / 14	44 / 72	62 / 89	42 / 70	/	1	1	7	1/2 167 / 254	66
MAURITANIA	0 / 0	0	0 / 0	2 / 2	0 / 0	2 / 2	12 / 27	31 / 65	/	1	1	/	47 / 96	00
ETHIOPIA	0 / 0	0	4 / 4	14 / 15	38 / 42	68 / 68	56 56	40 / 40	7	1	/	7	220 / 225	98
CHAD**	0 / 0	0	0 / 0	0	0 / 0	0 / 0	0	1 / 1	7	1	/	7	1 / 1	38
CAMEROON***	1 / 1	0	0 / 0	0 / 0	1 / 1	1 / 1	3 / 3	2 / 2	7	1	/	7	8 / 8	100
C.A.R. ****	0 / 1	2 / 3	3 / 5	0 / 0	0 / 1	0 / 0	/	/	/	1	1	/	5 /	50
TOTAL*	3058 / 5512	3 3134 / 6006	3155 / 5330	3077 / 5234	5227 / 8848	5598 / 10321	3467 / 6759	1083 / 2007	662 / 1115	0 / 0	0 / 0	0 / 0	10 28461 / 51132	50
% CONTAINED	55	52	59	59	59	54	51	54	59	U		0	56	

\* Provisional

\*\* Reported one case in September imported from Nigeria

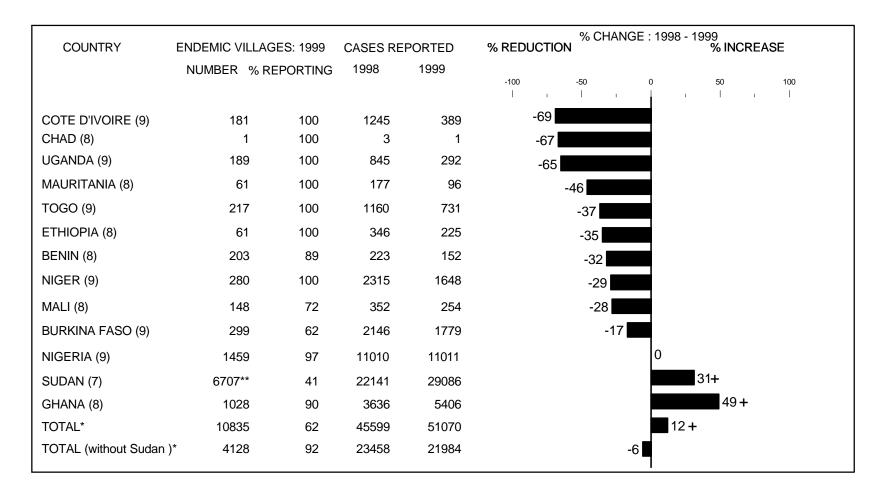
\*\*\* All 8 cases reported during January - August 1999 were imported from Nigeria.

\*\*\*\* Central African Republic reported 10 alleged (unconfirmed) cases of dracunculiasis for the period January - June, 1999. These cases are not included in the totals.

Table 1

### Figure 5

# Percentage of Endemic Villages Reporting and Percentage Change in Number of Indigenous Cases of Dracunculiasis During 1998 and 1999 \*, by Country

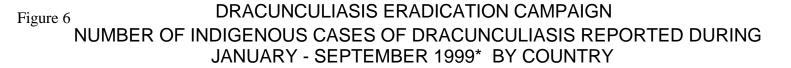


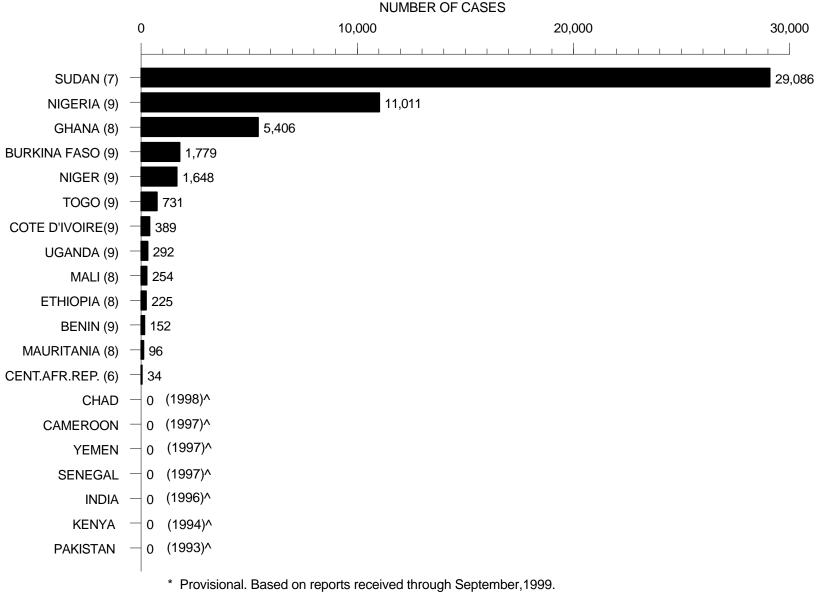
\* Provisional. Totals do not include imported cases.

\*\* Includes 1,830 known endemic villages that are not accessible to the program because of insecurity.

(6) Denotes number of months for which reports were received, e.g., Jan. - Jun., 1999

NR Countries with unknown or low rate of reporting.





- (8) Denotes number of months for which reports were received, e.g., Jan. Aug., 1999.
- ^ Year last indigenous case reported.

<u>Ghana.</u> In early October 1999, <u>Mr. Omar Abdi</u>, UNICEF Representative in Ghana, announced that the Guinea Worm Eradication Program would receive the support listed below.

- Cash assistance in the amount of Cedis 187,603,299 (about US \$ 69,741), plus sixteen motorcycles, and 83 bicycles for the Northern Region.
- Cash assistance on the amount of Cedis 178,095,841 (about US \$ 66,207) for Brong Ahafo Region.
- Cash assistance in the amount of Cedis 192,552,690 (about US \$ 71,581) for the Volta Region.

Ghana's GWEP reports that it has manufactured a total of 81,950 cotton-nylon cloth filters (see Guinea Worm Wrap-UP # 92) at a total cost of US \$48,381 or US \$0.58 per filter unit. The components of the total cost are: US \$ 23,641 for the cotton cloth, i.e., "gray baft" or "percale", US \$ 964 for transportation, US \$ 2, 542 for filter cord (draw string), US \$7,376 for the nylon cloth, and US \$13,234 for labor (sewing). Only 1,844 square meters of nylon cloth were used to fabricate the 81,950 filters.

During September-October 1999, Global 2000 consultants <u>Ms. Janet Scott</u>, <u>Dr. Rachel Barwick</u>, and <u>Mr. Harry Godfrey</u> assisted the Ghana Guinea Worm Eradication Program in the districts of Atebubu (Brong Ahafo Region), Kete Krachi (Volta Region), and East Gonja (Northern Region), respectively. In September Global 2000 funded the purchase of 30 bicycles for the Guinea worm eradication program in Volta Region.

#### **OBITUARY**

With sadness and regret we announce the passing of Dr. Gilbert Mpigika, on October 3, 1999. Dr. Mpigika was the first national coordinator of the Guinea Worm Eradication Program in Uganda. He directed the program from 1991 until 1998 when he became ill. He remained a special advisor to the program until his death.

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 is also available on the web at http://www.cdc.gov/ncidod/dpd/list\_drc.htm.



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