




Date August 10, 1998

From  WHO Collaborating Center  
Research, Training and Eradication of Dracunculiasis

Subject GUINEA WORM WRAP #81

To Addresses

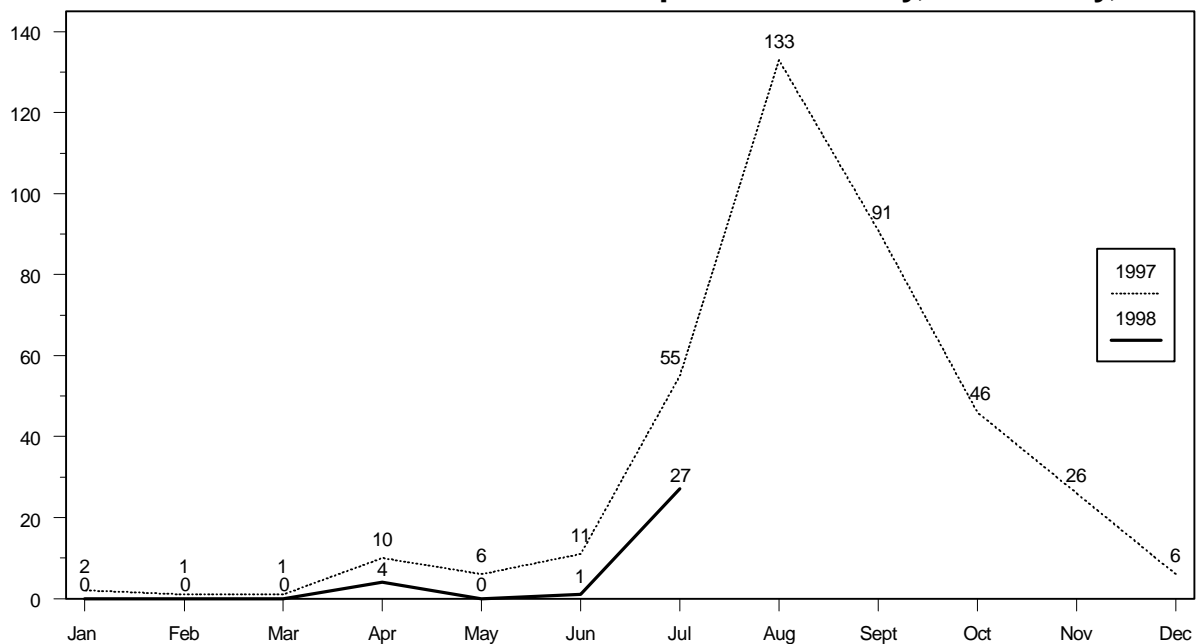
## Detect Every Case, Contain Every Worm!

### EXTERNAL REVIEW NOTES PROGRESS IN MAURITANIA; ABATE TRAINING HELD

During the second half of July, four review teams, including external reviewers Dr. Alhousseini Maiga of WHO and Mr. Harry Godfrey, consultant to Global 2000/The Carter Center, as well as local representatives of UNICEF and the Ministry of Health, visited 32 endemic localities in seven of the eight endemic regions of Mauritania. According to their preliminary report, “the review team was pleasantly surprised at the progress and quality of eradication efforts observed in the more highly endemic areas of the country . . . .” Monthly supervision, in particular, has been introduced in most of the highest endemic areas. The team also expressed its concern about the status of operations in the less endemic area of Tagant, but noted that Mauritania should be able to end transmission of dracunculiasis by the end of 1999. Mauritania reported 388 cases in 1997.

Figure 1

**Mauritania Guinea Worm Eradication Program**  
**Number of cases of dracunculiasis reported: January, 1997 - July, 1998**



In the first seven months of this year, Mauritania has reported a reduction of 63% in the incidence of dracunculiasis (Figures 1,2). The peak transmission season is July-October. The review team also helped the Ministry and UNICEF to conduct a two-day session to train 20 trainers from the eight endemic regions and 10 of the 15 endemic districts in the use of Abate. Abate has not been used in the Mauritanian program since 1994. In addition to the primary external support being provided to this program by UNICEF, other external support is or has been provided by the UN Foundation (through UNICEF), the Japan International Cooperation Agency (JICA), WHO, U.S. Peace Corps, the French volunteer agency AFVP, the Government of Spain, Global 2000, and CDC.

## BURKINA FASO APPOINTS DEPUTY COORDINATOR, INVESTIGATES SURVEILLANCE



The Government of Burkina Faso has appointed Dr. Draho Maxim as deputy national coordinator for their GWEP. Dr. Maxim was formerly coordinator for malaria control. He will now work full-time for the eradication of dracunculiasis in Burkina Faso, under the direction of Dr. Sanou Souleymane, head of the World Bank-assisted OCP devolution activity responsible for control of oncho-cerciasis and trypanosomiasis and eradication of dracunculiasis in the country.

As noted in Table 1 and Figure 2, Burkina Faso has so far reported 548 cases of dracunculiasis during the first six months of 1998, but the rate of reporting from villages under surveillance is unknown. Niger reported two cases of dracunculiasis imported from Burkina Faso in June (Table 2). Dr. Sanou and Dr. Guiguemde Robert of the OCCGE are conducting a study of five endemic villages to ascertain the proportion of dracunculiasis cases actually occurring that were reported to the program. Funding for the study, as well as for an evaluation of the program by Dr. Hien Mathias of OCCGE in March 1998 was provided by Global 2000 of The Carter Center. Dr. Hien has made several recommendations to the Ministry of Health for reinvigorating the program, including appointment of a deputy national program coordinator. Other external support for this program is being provided by UNICEF and WHO. Also, U.S. Peace Corps recently trained 25 Peace Corps Volunteers for work in endemic areas of the country. It is expected that a national Program Review will be held in November.

## PRIME MINISTER OF UGANDA CELEBRATES GUINEA WORM DAY



The Prime Minister of Uganda, the Honorable Kintu Musoke, presided at Uganda's celebration of Guinea Worm [Eradication] Day in Bokora County, Moroto District, on July 21, 1998. Bokora is the most endemic county in Moroto, which is one of only three remaining endemic counties in the country. Participants visited three endemic villages, where the prime minister commissioned a borehole well (Kogette), examined patients (Lomerimorong), and where Abate teams from Kotido and Moroto Districts demonstrated the application of Abate (Lomeriama). Over 1,000 villagers and health team members attended the event, in addition to the Minister of Health, Dr. Crispus Kiyonga; Minister of State for Karamoja Affairs, Mr. Peter Lokeris; National Program Coordinator, Dr. John Bosco Rwakimari; other ministry officials, and representatives of UNICEF, WHO, and Global 2000/The Carter Center. Uganda Television produced extensive coverage of the events.

*We regret to report the death, on July 30, of Mr. John Okidi after a lengthy illness. Mr. Okidi helped start the Guinea Worm Eradication Program in Uganda, serving as its Field Coordinator, based at first in Gulu District, before moving to Kampala headquarters a few years ago. He often risked his life in areas of high insecurity on behalf of the program. He represented Uganda at the Program Review in Yemen in September 1997. The Guinea Worm Eradication Program is grateful for his dedication and commitment, and we extend our condolences to his family.*

**NUMBER OF CASES CONTAINED AND NUMBER REPORTED BY MONTH DURING 1998\***  
**(COUNTRIES ARRANGED IN DESCENDING ORDER OF CASES IN 1997)**

COUNTRY	NUMBER OF CASES CONTAINED / NUMBER OF CASES REPORTED													CONT.
	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL*	
SUDAN	465 / 1328	856 / 1254	889 / 1520	1610 / 2592	1789 / 2988	2044 / 3175	/	/	/	/	/	/	7653 / 12857	60
NIGERIA	1498 / 1511	1224 / 1305	1211 / 1279	854 / 942	949 / 1220	953 / 1485	/	/	/	/	/	/	6689 / 7742	86
GHANA **	870 / 1277	535 / 709	478 / 554	276 / 382	208 / 263	169 / 226	/	/	/	/	/	/	2536 / 3411	74
NIGER	7 / 11	4 / 4	5 / 5	42 / 43	129 / 168	277 / 367	411 / 687	/	/	/	/	/	875 / 1285	68
BURKINA FASO	1 / 1	1 / 6	1 / 16	12 / 152	116 / 263	39 / 110	/	/	/	/	/	/	170 / 548	31
TOGO	72 / 254	22 / 95	29 / 78	14 / 26	29 / 46	53 / 70	/	/	/	/	/	/	219 / 569	38
UGANDA ***	7 / 8	3 / 6	24 / 43	167 / 226	190 / 295	159 / 180	/	/	/	/	/	/	550 / 758	73
COTE D'IVOIRE	151 / 251	110 / 138	115 / 184	65 / 195	110 / 158	46 / 69	/	/	/	/	/	/	597 / 995	60
MALI	9 / 10	2 / 5	0 / 0	17 / 21	4 / 8	21 / 62	/	/	/	/	/	/	53 / 106	50
BENIN	88 / 99	22 / 36	9 / 9	28 / 29	23 / 23	9 / 9	/	/	/	/	/	/	179 / 205	87
ETHIOPIA	1 / 1	6 / 6	10 / 10	59 / 61	66 / 68	86 / 90	78 / 83	/	/	/	/	/	306 / 319	96
MAURITANIA	0 / 0	0 / 0	0 / 0	4 / 4	0 / 0	1 / 1	? / 27	/	/	/	/	/	5 / 32	16
CHAD	0 / 0	2 / 2	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	/	/	/	/	/	2 / 2	100
YEMEN	0 / 0	0 / 0	0 / 0	/	/	/	/	/	/	/	/	/	0 / 0	~
SENEGAL	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	/	/	/	/	/	/	0 / 0	~
CAMEROON ****	0 / 0	0 / 0	0 / 0	0 / 0	2 / 2	? / 3	? / 2	/	/	/	/	/	2 / 7	29
TOTAL*	3169 / 4751	2787 / 3566	2771 / 3698	3148 / 4673	3615 / 5502	3857 / 5847	489 / 799	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	19836 / 28836	69
% CONTAINED	67	78	75	67	66	66	61						69	

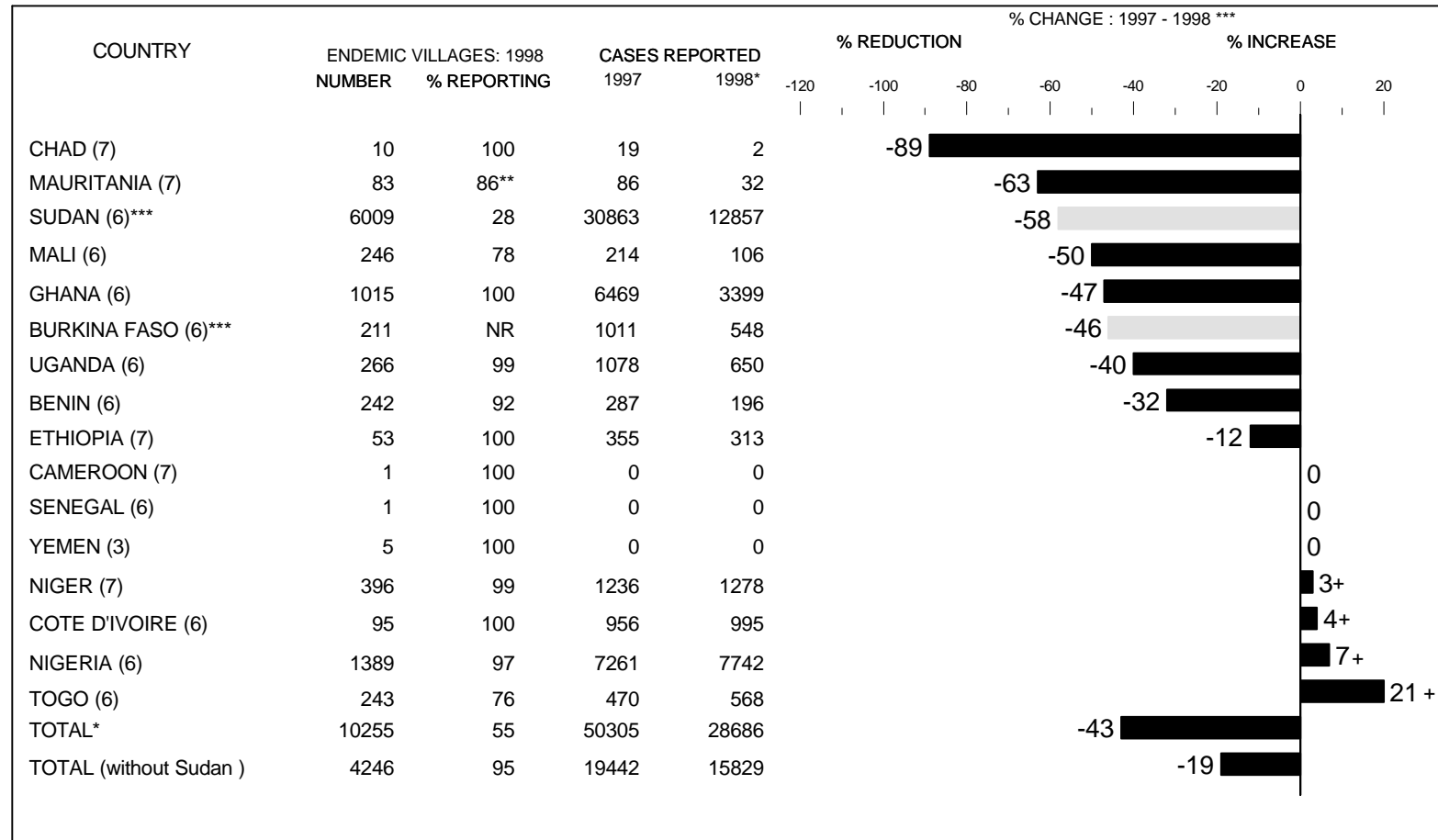
\* Provisional

\*\* Reported 1 case imported from Togo in May and 11 in June.

\*\*\* Reported 5 cases imported from Sudan in March, 13 in April, 49 in May, and 41 in June.

\*\*\*\* Reported 2 case imported from Nigeria in May, 3 in June and 2 in July.

## PERCENTAGE OF ENDEMIC VILLAGES REPORTING AND PERCENTAGE CHANGE IN NUMBER OF INDIGENOUS CASES OF DRACUNCULIASIS DURING 1997 AND 1998\* , BY COUNTRY



\* Provisional. Totals do not include imported cases.

\*\* During January - March. % reporting during April - July not reported.

\*\*\* Countries with low rate of monthly reporting (<50%) from endemic villages. Gray bars indicate over estimation of percentage reductions due to under reporting from endemic villages.

(3) Denotes number of months for which reports were received, e.g., Jan. - Mar., 1998

NR Not Reported

## INCREASE IN REPORTED IMPORTATIONS OF CASES OF DRACUNCULIASIS

During January-July 1997, endemic countries declared only 49 imported cases of dracunculiasis, whereas a provisional total of 149 imported cases have been reported during the same period in 1998 (Table 2). Because of the significant increase in reported importations of cases of dracunculiasis this year, beginning with this issue, Figure 2 will show the percentage reductions in autochthonous (indigenous) cases by country, rather than the percentage reductions based on all cases reported during the comparable periods in 1997 and 1998.

### Dracunculiasis Eradication Campaign Reported Importations of Cases of Dracunculiasis: 1998

From	To	Cases			
		Month	Number	Contained	Notified*
Burkina Faso	Niger	January	1	1	1
		June	2	1	2
Ghana	Benin	January	4	4	4
		March	1	1	1
	Togo	June	1	?	?
Libya??	Ghana	January	1	1	1
Nigeria	Cameroon	May	2	2	2
		June	3	?	3
	Benin	January	1	1	?
		April	1	1	1
	Niger	February	2	2	?
		April	1	1	1
		May	1	?	?
Sudan	Ethiopia	May	2	2	?
		June	3	3	?
		July	1	1	1
	Uganda	March	5	5	5
		April	13	2	13
		May	49	17	49
		June	41	41	1
Togo	Benin	April	1	1	1
		May	1	?	?
	Ghana	May	1	1	?
		June	11	11	?
Total			149	99	86

\* Notified to country of origin through WHO.

## COTE D'IVOIRE CELEBRATES GUINEA WORM ERADICATION DAY



The Minister of Public Health of Côte d'Ivoire, the Honorable Professor Maurice Kakou Guikahue, led a long list of dignitaries at the fifth annual celebration of Côte d'Ivoire's National Day of Mobilization for the Eradication of Guinea Worm Disease, on July 10. The main event occurred in the village of Bangoua in Agnibilekro Sanitary District. Also attending, in addition to the villagers themselves, were the National Program Coordinator, Dr. Henri Boualou; other officials of the Ministry of Public Health and other ministries; representatives of WHO, UNICEF, and U.S. Peace Corps; and national press (radio, television, and print). During the celebration, the representative of UNICEF presented the village health workers (Agents de Santé Communautaire) with machetes and files for sharpening them, soap, and cooking oil, as non-monetary incentives. The NGO MAP International presented medicines for the first aid kits used to tend to patients. The minister also plans to visit endemic areas in the sanitary districts of Seguela and Bondoukou later this year. All village health workers will be re-trained in case containment in September.

## NIGERIA: NEW GLOBAL 2000 REPRESENTATIVE



Dr. Emmanuel Miri has been appointed the new Global 2000 Representative for Nigeria. For the past two years, Dr. Miri has been the representative for the Global 2000 River Blindness Program in Nigeria. He previously was country director of the River Blindness Foundation in Nigeria, and worked in the Plateau State Ministry of Health before that. Dr. Miri holds a medical degree from Ahmadu Bello University in Nigeria, a DTM&H from the London School of Tropical Medicine and Hygiene, and an MA in Public Health Education from Montclair State College in the USA. He now assumes in-country responsibility for all of the health projects of the Global 2000 Program of The Carter Center in Nigeria, including dracunculiasis eradication. Dr. Miri's appointment becomes effective in mid-August. He replaces Mr. Wayne Duncan (for dracunculiasis), who returns to CDC.

Authorities from Nigeria and Cameroon held their regularly scheduled border meeting on July 11. The next meeting is scheduled for August 27. NIGEP's Southeast Zone will hold its next Zonal meeting on September 16, at Calabar. In July, UNICEF/Nigeria facilitated the delivery of the last consignment of donated filter material for NIGEP, as well as the latest consignment of Abate. The 20 LGAs reporting 65% of Nigeria's cases, July 1997-June 1998, are shown on Figure 3.

## IN BRIEF:

Ghana will hold a national Program Review meeting for its Guinea Worm Eradication Program on October 1-2.

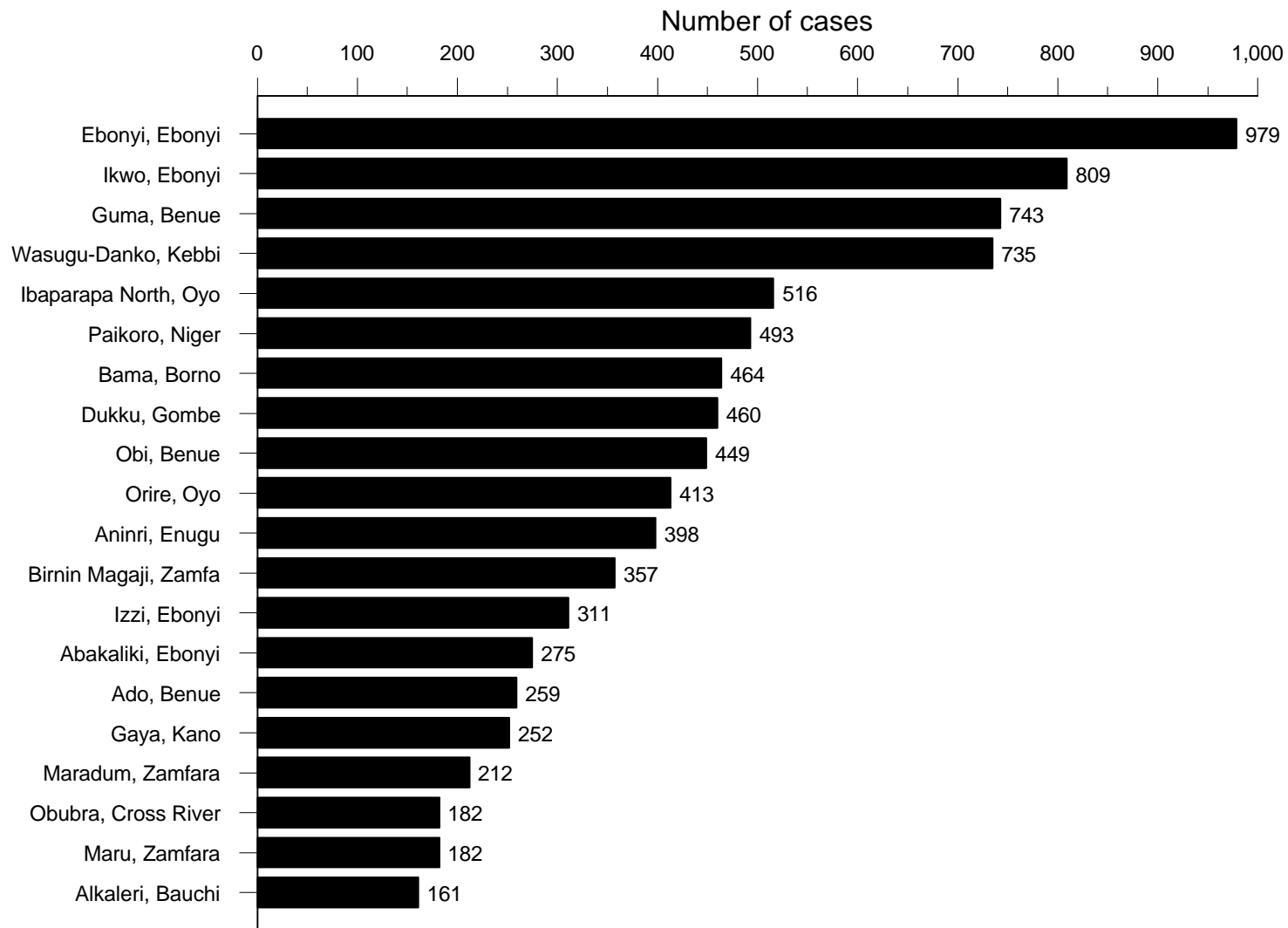
In Niger, Tillabery Department has emerged as the highest endemic department in the country, surpassing Zinder, which has reduced its cases dramatically (see Figure 4).

As of July 1998, India has been two years with no indigenous case of dracunculiasis and Senegal will have been one year with no case.

Within the next two months, the respective ministers of health of Côte d'Ivoire, Niger, and Togo plan to visit endemic villages of their country.

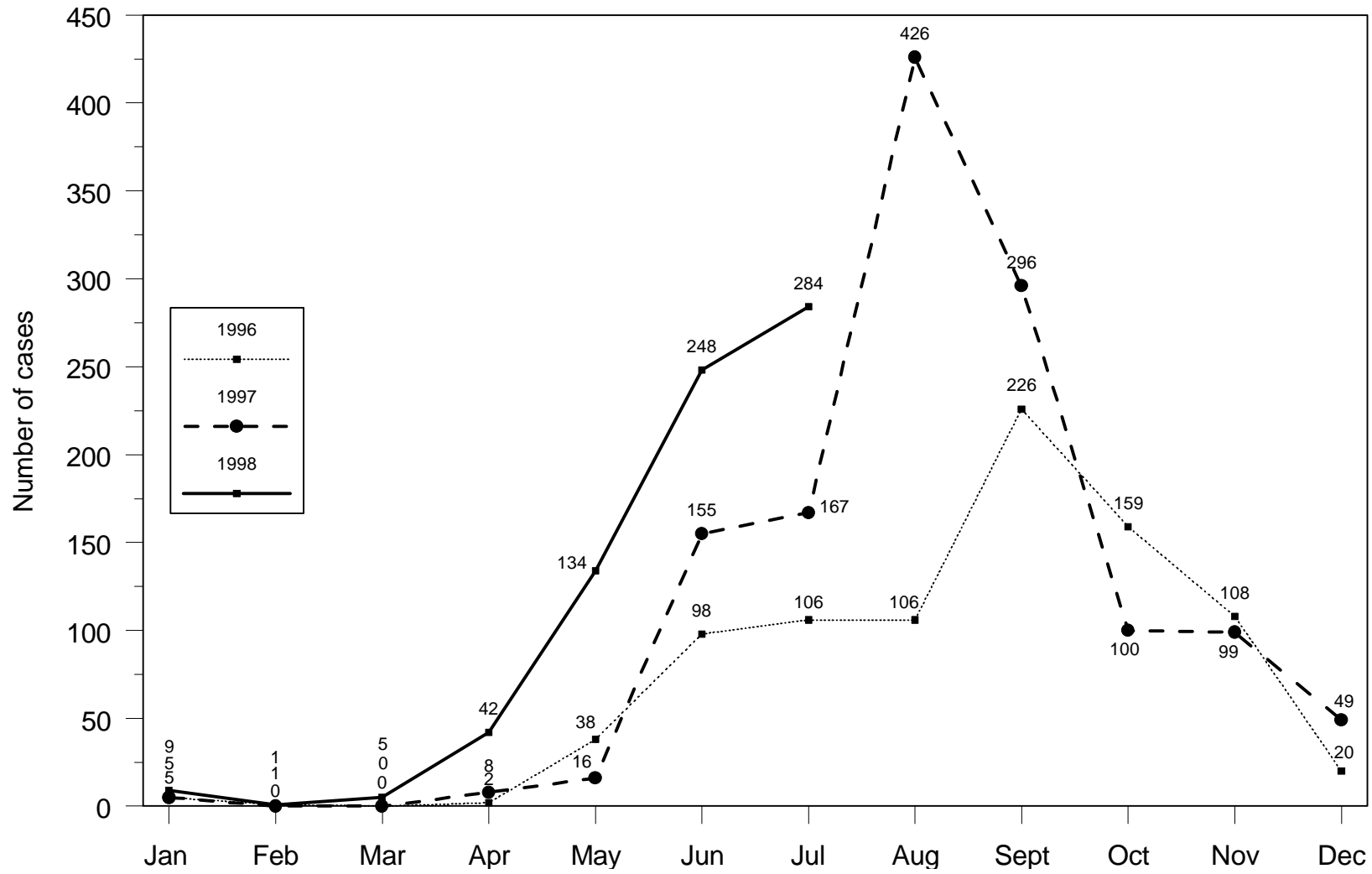
Yemen. 6 of 7 cases in 1997 were detected during January - June of that year. Through July this year, zero cases have been reported from the Governorates of Ibb and Sana'a, and zero cases from Dhamar Governorate during January-March 1998. The status of dracunculiasis in Dhamar during April-July 1998 is now being assessed. The last case of dracunculiasis in Yemen was reported in September 1997.

Nigeria Guinea Worm Eradication Program  
20 LGAs reporting 8,489 (65%) of 13,070 cases reported during  
the epidemiologic year July 1997 - June 1998



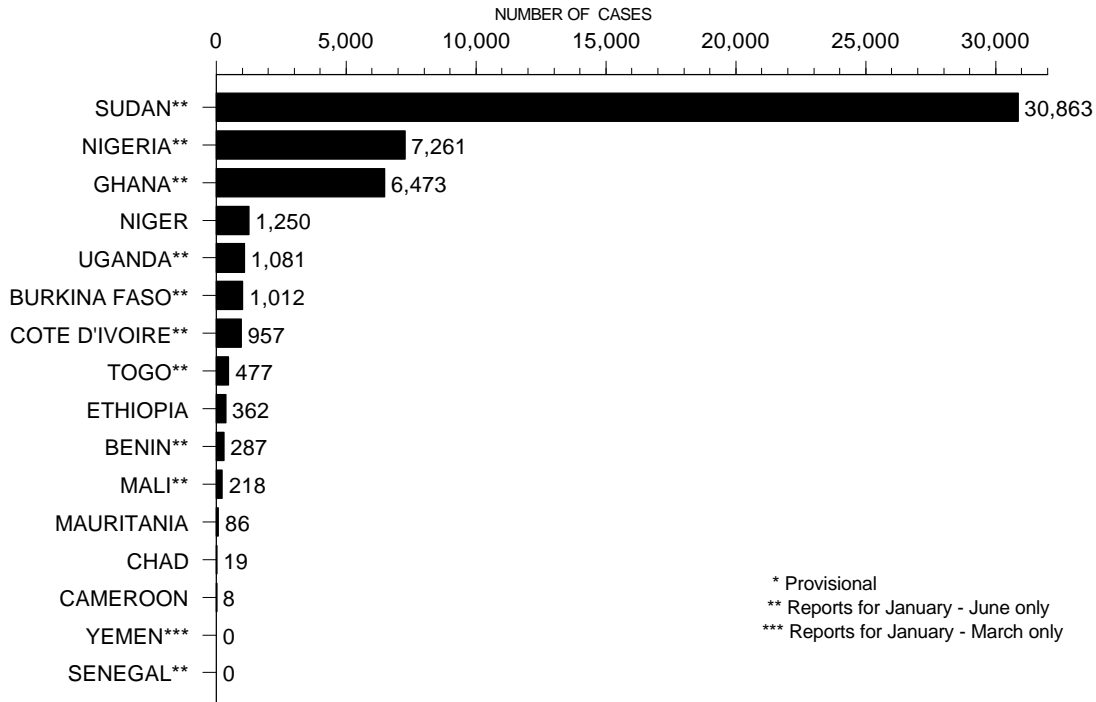
## Niger Guinea Worm Eradication Program

### Number of cases of dracunculiasis reported from Tillabery Department: 1996 - 1998

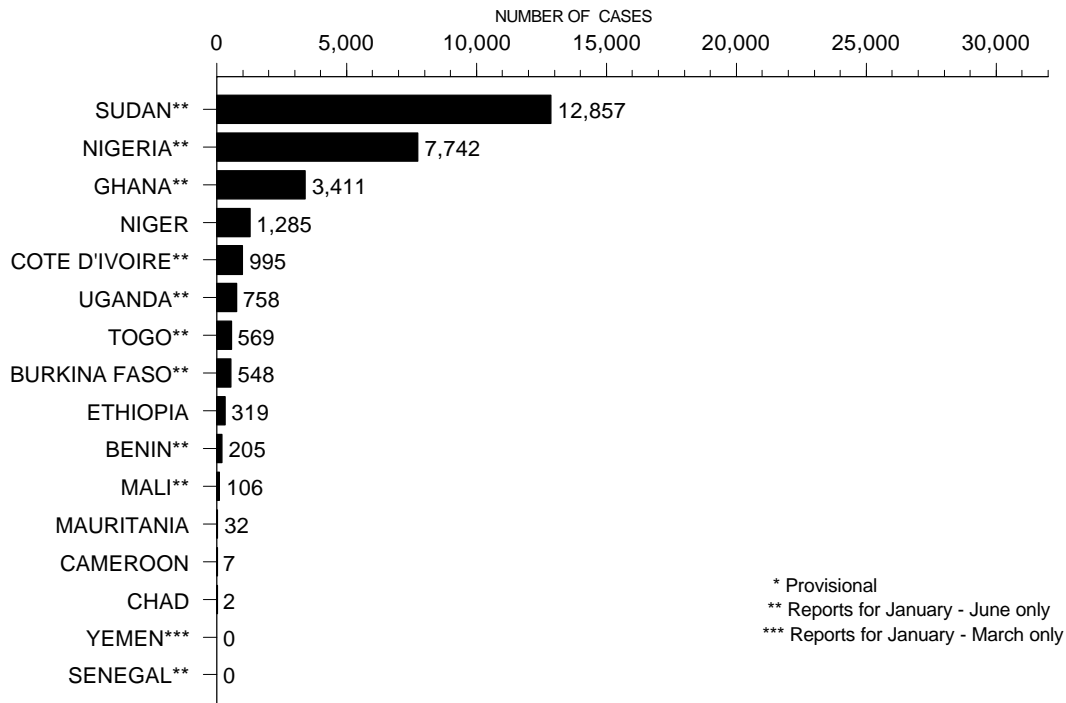




**DISTRIBUTION OF 50,354 CASES OF DRACUNCULIASIS  
REPORTED: JANUARY - JULY 1997\***

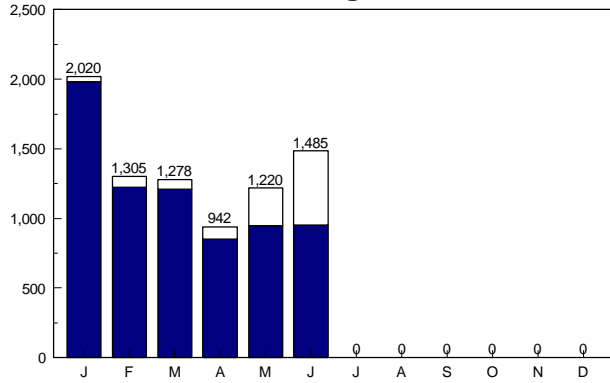


**DISTRIBUTION OF 28,836 CASES OF DRACUNCULIASIS  
REPORTED: JANUARY - JULY 1998\***

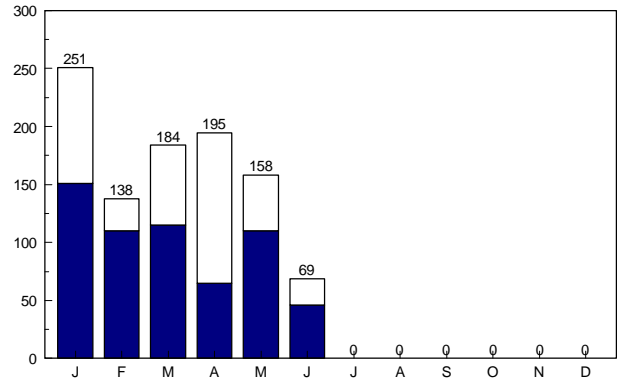


NUMBER OF CASES OF DRACUNCULIASIS REPORTED: 1998  
 (Number of cases reported that were contained are shaded black)

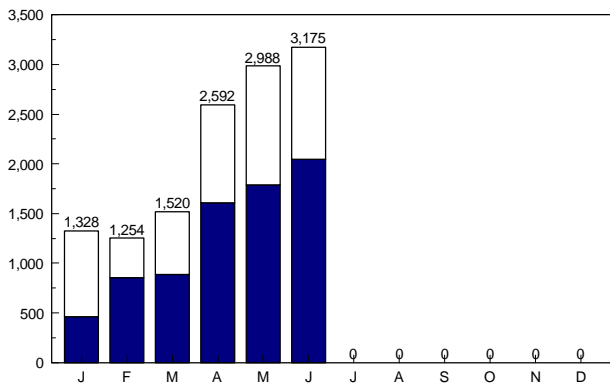
Nigeria



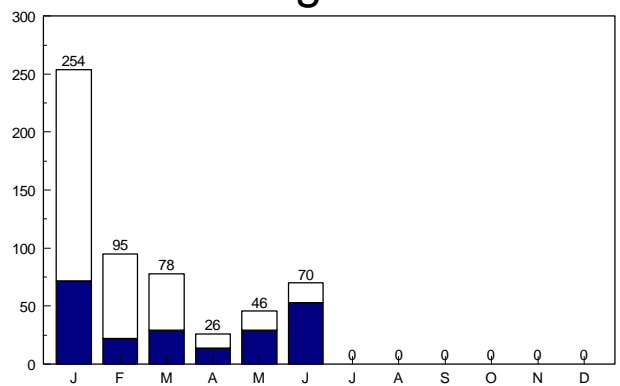
Côte d'Ivoire



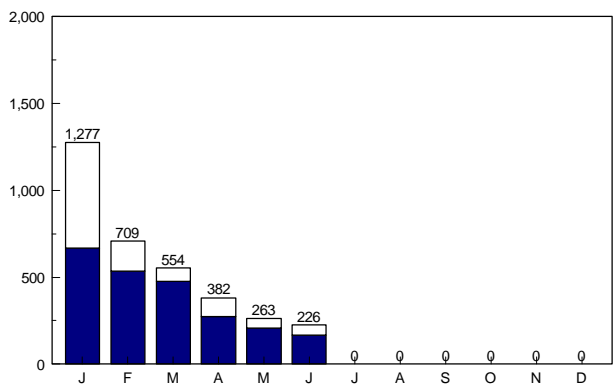
Sudan



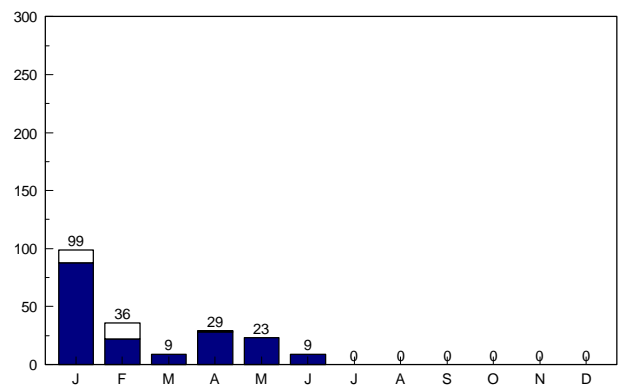
Togo



Ghana



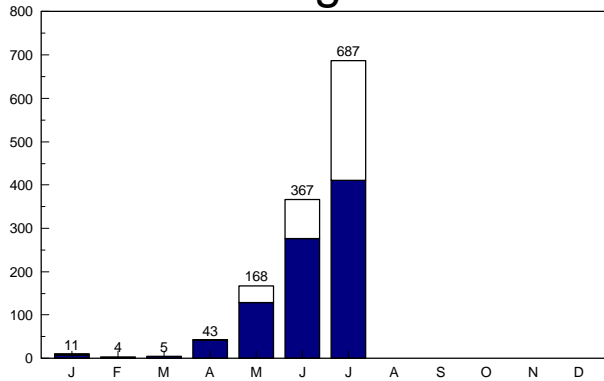
Benin



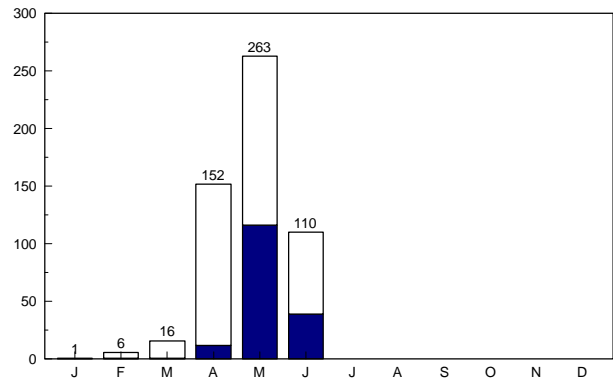
# NUMBER OF CASES OF DRACUNCULIASIS REPORTED: 1998

(Number of cases reported that were contained are shaded black)

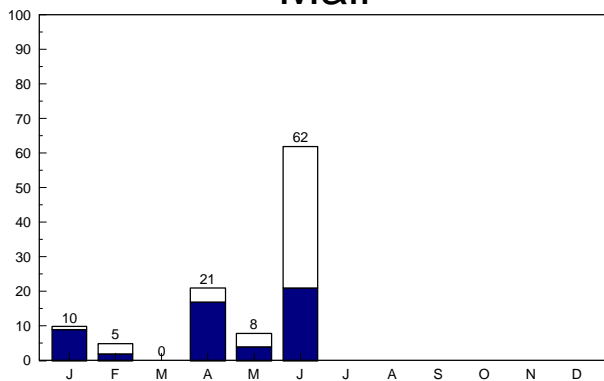
## Niger



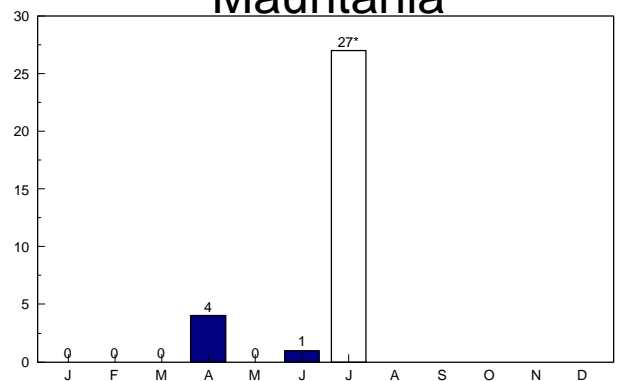
## Burkina Faso



## Mali

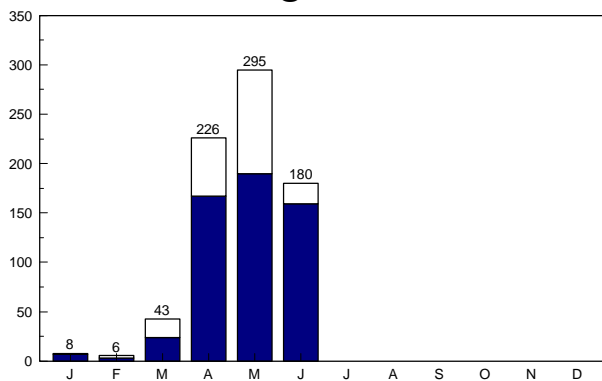


## Mauritania

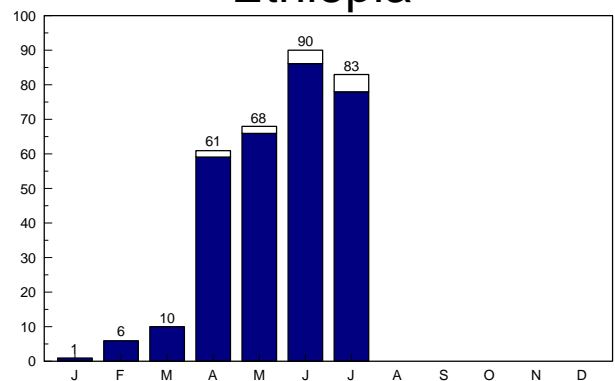


\* number of cases contained not reported

## Uganda



## Ethiopia



## INTERAGENCY MEETING CONSIDERS TARGET DATES

Representatives of the Agency for International Development (AID), The Carter Center/Global 2000, Centers for Disease Control and Prevention (CDC), Peace Corps, World Bank, World Health Organization (WHO), and the United National Childrens' fund (UNICEF), convened in Washington, DC on July 31 for the 35th meeting of the Interagency Coordinating Group for Dracunculiasis Eradication. Dr. Joel Breman, member of the International Commission for the Certification of Dracunculiasis Eradication also attended. The meeting was hosted by AID. Participants reviewed the status of the program in each endemic country, and considered potential solutions for various problems which were discussed. In follow-up to the African Regional Conference held in Bamako last April, they also discussed the following proposed timetable of target dates for eradication of dracunculiasis outside of Sudan over the next two years:

No transmission after December 1999: Benin, Ethiopia, Mali, Mauritania, Uganda.

No transmission after December 2000: Burkina Faso, Côte d'Ivoire, Ghana, Niger, Nigeria, Togo.

It is assumed that Cameroon, Chad, India, Kenya, Senegal, and Yemen have already interrupted transmission, or will do so in 1998. So far, Benin and Nigeria have confirmed the respective target dates indicated above.

## RECENT PUBLICATIONS



Farooki S, Seeger LL, Gold RH, 1998. Beware the pseudo guinea worm! Radiology, 208(2):553-554, Aug.

Hopkins, Donald R, 1998. The guinea worm eradication effort: Lessons for the future (Special Issue). Emerg Infec Dis, 4(3):414-415, July-September.

Olive JM, Aylward RB, Melgaard B, 1997. Disease eradication as a public health strategy: Is measles next? World Hlth Stat Q, 50(3-4):185-187.

WHO, 1998. International Commission for the Certification of Dracunculiasis Eradication. Third Meeting Report and Recommendations, World Health Organization, 18pp.

*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 Trenton K. Ruebush, MD, 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.*

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