



Date: April 19, 1999

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

Subject: GUINEA WORM WRAP-UP # 89

To: Addressees

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

### **TWELVE COUNTRIES ATTEND PROGRAM REVIEW AT DAKAR**



Carter Center

Representatives of twelve francophone countries (Benin, Burkina Faso, Cameroon, Central African Republic, Chad, Côte d'Ivoire, Guinea, Mali, Mauritania, Niger, Senegal, Togo) attended the annual Program Review for French-speaking countries in Dakar, Senegal on April 6<sup>th</sup>-9<sup>th</sup>. The Review, which was organized by WHO, and co-sponsored by UNICEF and The Carter Center (Global 2000), had been postponed from late 1998. In addition to reviewing the status of dracunculiasis eradication in the individual countries, the Review included presentations by Mali and Niger on epidemiological surveillance for dracunculiasis among nomadic populations. Also attending, in addition to representatives of the three co-sponsoring agencies, were representatives from OCCGE, The World Bank, Health and Development International, and CERMES. The minister of health of Senegal, His Excellency Assane Diop, opened the meeting officially. A summary of the status of the disease in the countries represented is given below. As a result of the data presented, revised Tables and Figures summarizing the final epidemiological status of dracunculiasis for 1998 are also included in this issue.

Apart from the apparent interruption of transmission in Cameroon, Senegal, and probably Chad in 1998, the most noteworthy result presented at this review was the dramatic average reduction in cases of -59% in Benin, Côte d'Ivoire and Togo in January-February 1999, during their peak transmission season. Beginning in January 1998, programs in those three countries were assisted by intensive short-term consultancies that were provided by The Carter Center/Global 2000, Health and Development International, and CDC. Seguela, the highest endemic sanitary region in Côte d'Ivoire in 1998, reduced its reported incidence by -91% in January-February 1999! This significant reduction is a tribute to the dedicated work of Dr N'Dolli Kouakou, District Medical Director, US Peace Corps Volunteers Philip Downes, Cindy Stover, and Stacy Ellington, Global 2000 consultant Misrak Makonnen, and to the support provided by the national secretariat, including Dr. Henri Boualou, National Program Coordinator.

Niger contained 67% of its 2,700 cases in 1998, provided filters to 94% of endemic households, and used Abate® in 38% of endemic villages. 61% of endemic villages have at least one source of safe drinking water. Reduced incidence in 1998 by 11% and endemic villages by 29% from 1997. Reduced incidence in January-February 1999 by 73%. Tera District in Tillaberi Region is one of only three areas in West Africa with more than 1,000 cases reported in 1998 (Bama LGA of Nigeria's Borno State, and Atebubu District

Burkina Faso held a national workshop during March 10-11, 1999 to re-launch efforts to halt transmission of dracunculiasis by 31 December 2000. During the workshop a national plan of action and budget were discussed with national program staff, donors, and collaborating organizations. The Guinea Worm Eradication Program is preparing to begin systematic interventions in three main endemic zones starting in May, which is the beginning of the peak transmission season. During 1998 a total of 495 (22%) of 2,227 cases reported were contained. Although cases were reported from 236 villages, monthly reporting from known endemic villages was only 50%.

Togo contained 49% of 2,128 cases in 203 villages in 1998. 54% of endemic households have 100% filter

Cameroon reported a total of 23 cases, all imported from Nigeria. All but one was contained.

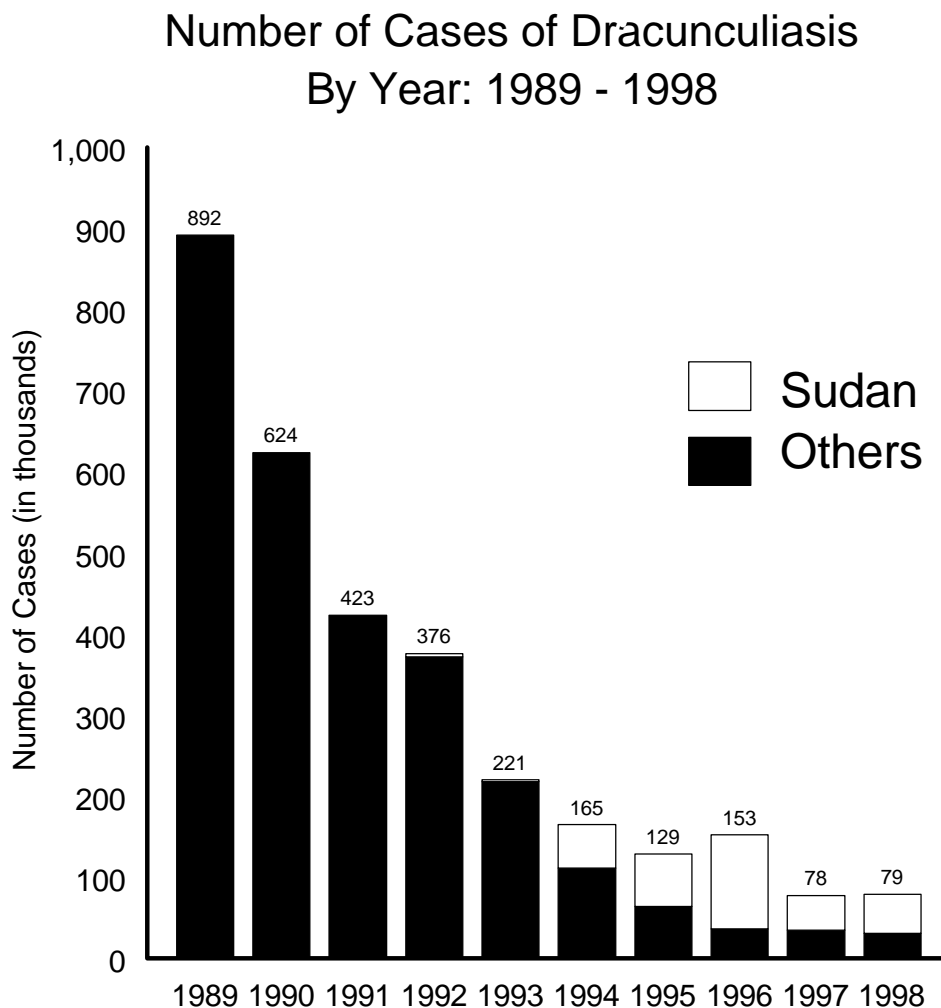
Senegal has reported no case since July 1997.

Guinea has reported no indigenous cases of dracunculiasis for several years.

### INTERAGENCY MEETING:

Representatives of The Carter Center/Global 2000, Health and Development International, OCCGE, World Bank, UNICEF and World Health Organization participated in the 37<sup>th</sup> Meeting of the Interagency Coordinating Group for Dracunculiasis Eradication, which was held at the Novotel Hotel in Dakar. The meeting was held after the conclusion of the Program Review for French-speaking countries, on April 9<sup>th</sup>. Participants discussed strategies for addressing the requests for external assistance made by representatives of the countries who attended the Program Review.

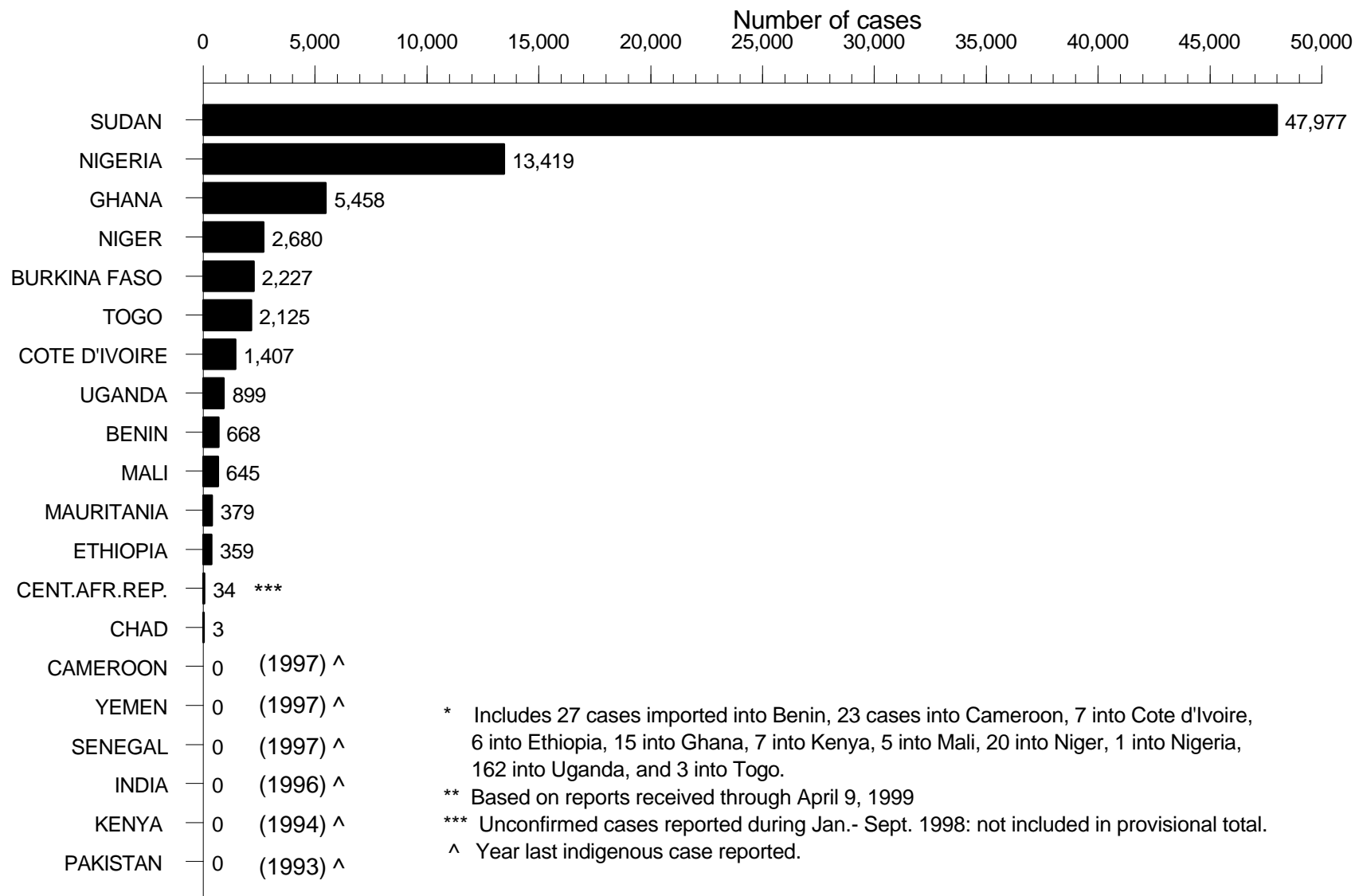
Figure 1



\* Based on reports received through April 9, 1999

Figure 2

## Distribution by Country of 78,522\* Cases of Dracunculiasis Reported During 1998\*\*



\* Includes 27 cases imported into Benin, 23 cases into Cameroon, 7 into Cote d'Ivoire, 6 into Ethiopia, 15 into Ghana, 7 into Kenya, 5 into Mali, 20 into Niger, 1 into Nigeria, 162 into Uganda, and 3 into Togo.

\*\* Based on reports received through April 9, 1999

\*\*\* Unconfirmed cases reported during Jan.- Sept. 1998: not included in provisional total.

^ Year last indigenous case reported.



**Percentage of Endemic Villages Reporting  
and Percentage Change in Number of Indigenous Cases of Dracunculiasis  
During 1997 and 1998 \*, by Country**

SENEGAL (12)	0	~	4	0
YEMEN (12)	0	~	7	0
CAMEROON (12)	0	~	1	0
CHAD (12)	2	100	25	3
MALI (12)	177	78	1080	645
GHANA (12)	625	100	8914	5448
UGANDA (12)	164	100	1359	899
BENIN (12)	179	94	839	668
ETHIOPIA (12)	41	100	439	359

\* Provisional. Totals do not include imported cases.

\*\* As of 1 January 1999.

~ All villages under surveillance reported.

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

NR Countries with unknown rate of reporting from endemic villages.

Table 2

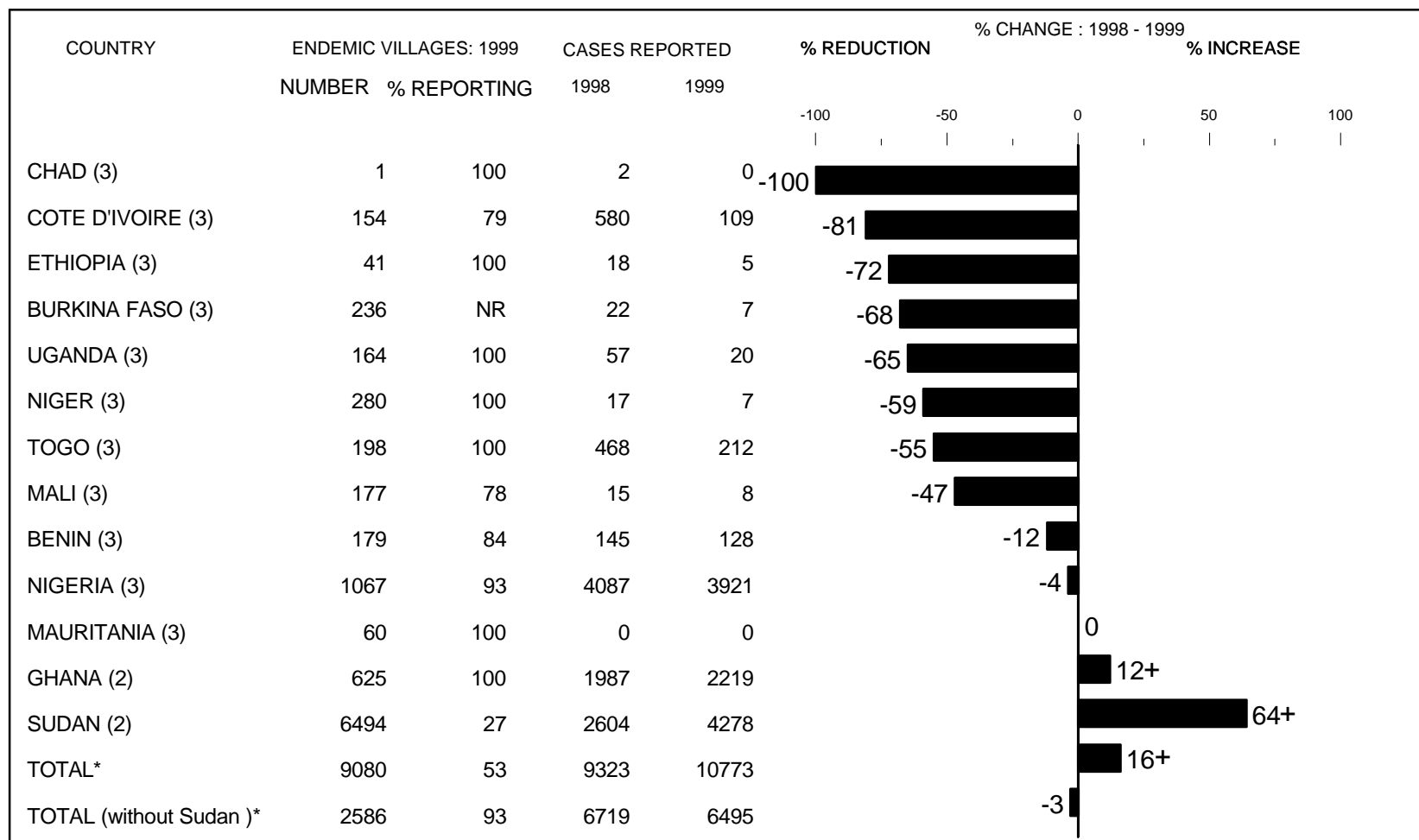
**Number of cases contained and number reported by month during 1999\***  
**(Countries arranged in descending order of cases in 1998)**

COUNTRY	NUMBER OF CASES CONTAINED / NUMBER OF CASES REPORTED												TOTAL*	CONT.	%	
	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER				
SUDAN	1008 / 2004	1288 / 2274	153 / 228	/	/	/	/	/	/	/	/	/	2449 /	4506		
NIGERIA	596 / 1358	752 / 1432	902 / 1131	/	/	/	/	/	/	/	/	/	2250 /	3921	57	
GHANA	489 / 1142	632 / 1077	/	/	/	/	/	/	/	/	/	/	1121 /	2219	51	
NIGER	2 / 2	3 / 3	2 / 2	/	/	/	/	/	/	/	/	/	7 /	7	100	
BURKINA FASO	0 /	0 /	7 /	/	/	/	/	/	/	/	/	/	7 /	7	100	
TOGO	87 / 102	57 / 84	15 / 28	/	/	/	/	/	/	/	/	/	159 /	214	74	
COTE D'IVOIRE	58 /	29 /	13 /	/	/	/	/	/	/	/	/	/	100 /	110	91	
UGANDA	3 /	7 /	7 /	/	/	/	/	/	/	/	/	/	17 /	20	85	
BENIN	84 /	22 /	14 /	/	/	/	/	/	/	/	/	/	120 /	130	92	
MALI	1 /	2 /	3 /	/	/	/	/	/	/	/	/	/	6 /	8	75	
MAURITANIA	0 /	0 /	0 /	/	/	/	/	/	/	/	/	/	0 /	0		
ETHIOPIA	0 /	0 /	5 /	/	/	/	/	/	/	/	/	/	5 /	5	100	
CHAD	0 /	0 /	0 /	/	/	/	/	/	/	/	/	/	0 /	0		
CAMEROON	0 /	0 /	1 /	/	/	/	/	/	/	/	/	/	1 /	1	100	
TOTAL*	2328 /	2792 /	1122 /	0 /	0 /	0 /	0 /	0 /	0 /	0 /	0 /	0 /	6242 /	11148	56	
% CONTAINED	49	56	78/										56			

\*provisional

Figure 4

### 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.

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

NR Countries with unknown or low rate of reporting.



## GHANA: THE WORM FIGHTS BACK IN ATEBUBU



Republic of Ghana Atebubu District of Brong-Ahafo Region and the adjoining “overseas” part of East Gonja District of Northern Region are now the epicenter of dracunculiasis transmission in Ghana. Atebubu District alone reported 1,063 cases (in 33 villages) in 1998, which was almost 20% of the national total. Authorities in both regions and the national Guinea Worm Eradication Program are making vigorous efforts to find and contain all cases in the area, which is also the source of numerous cases exported to other parts of Ghana. Northern Region Guinea worm coordinator Patrick Apoya reports that large gatherings at funerals are proving to be an important mode of spread of the disease. The status of cases reported from Northern, Volta and Brong-Ahafo Regions so far in 1999 is given in Figure 6. The increases are at least partly attributed to delays in release of ministry of health funding in January-March 1998, and to depletion in January 1998 of Abate supplies in part of Northern Region. In 1998, 90% of Ghana’s reported cases were located in only 17 of the country’s 110 districts (Figure 5). Five of Ghana’s 10 regions had no indigenous cases in January 1999; 4 regions had no indigenous cases in February.

Meanwhile, two important districts in Northern Region, Gushiegu-Karaga and Nanumba, reduced their reported cases of dracunculiasis by 83% (from 1,869 to 325) and 61% (from 1,024 to 403), respectively, between 1997 and 1998. Gushiegu-Karaga District was the highest endemic district in Ghana in 1997, when President Jerry Rawlings visited there to re-launch the program in October. Global 2000 and World Vision helped provide safe drinking water to the district capitol in Gushiegu beginning in 1997. Also, efforts by the Savelugu-Nanton District Assembly, World Vision (supported by the Hilton Foundation), Global 2000 and UNICEF to provide safe drinking water for the town of Savelugu are beginning to bear fruit. By late March, four successful boreholes had been drilled in different parts of the town: three low yields and one high yield. The low yield boreholes are to be fitted with handpumps in early April. Water from the high yield borehole will be distributed via standpipes from an overhead tank.

### IN BRIEF:

Ethiopia. Global 2000 resident technical advisor Mr. Teshome Gebre reports that a team of two volunteer Ethiopian health workers has reached Naita. They have searched 49 hamlets in the area so far and found no cases of dracunculiasis. They also discovered that health workers from the Diocese of Torit NGO in Eastern Equatoria State of Sudan have provided health education about dracunculiasis prevention to the population in this area for sometime. Ethiopia has reported zero cases in January and February 1999. Intensified surveillance is however needed to ascertain the absence of the disease throughout areas considered at risk.

### RECENT PUBLICATIONS

Sing, A; Wienert, P; Sabisch, P; Heesemann, J; Rinecker, H. 1998. Photo quiz. Infection due to *Dracunculus medinensis*. Clinical Infectious Diseases. 27 (6); 1361, 1508-9.



**Figure 6**

**Ghana Guinea Worm Eradication Program  
Number of Cases of Dracunculiasis reported Monthly  
From Northern, Volta and Brong Ahafo regions During 1998 and 1999**

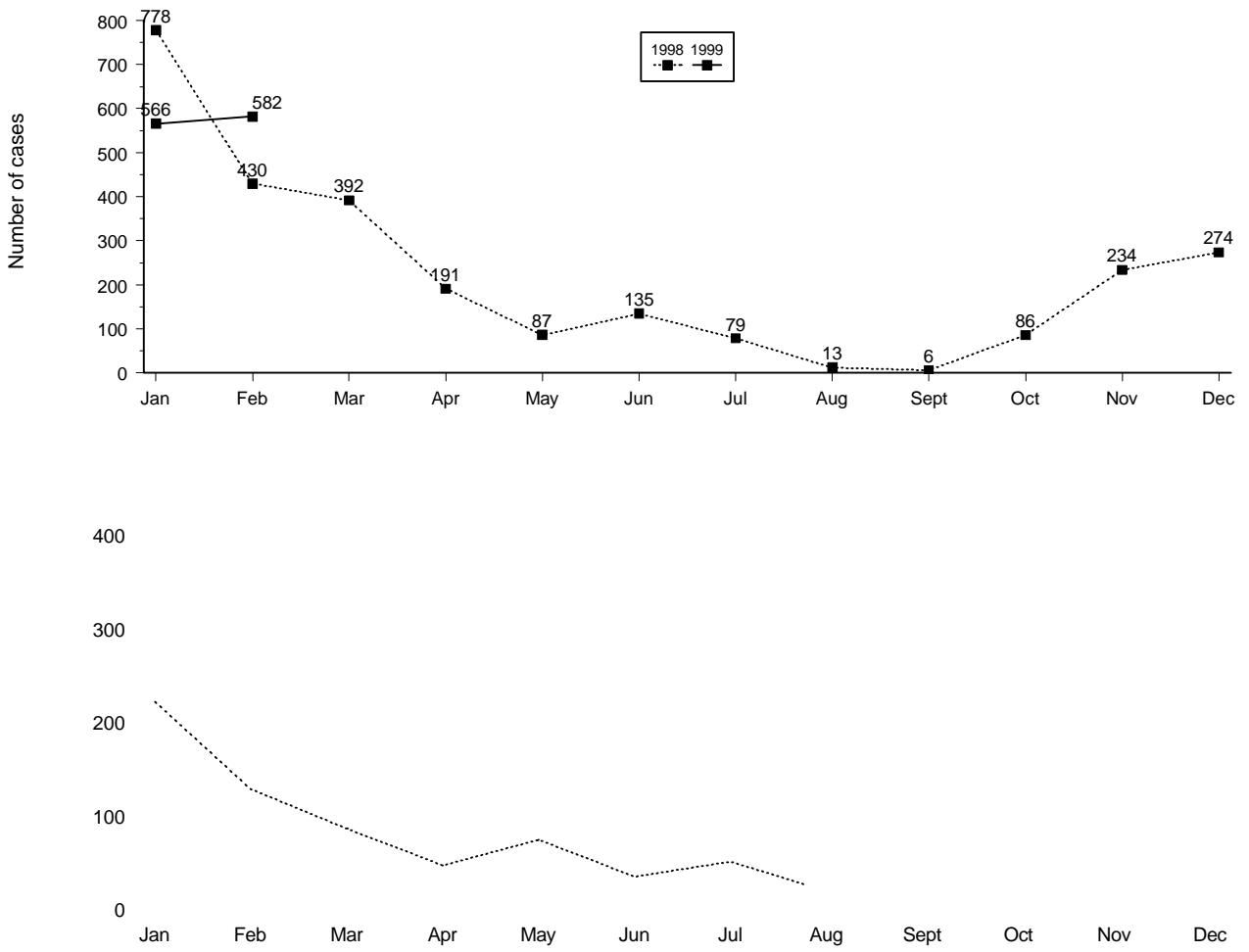
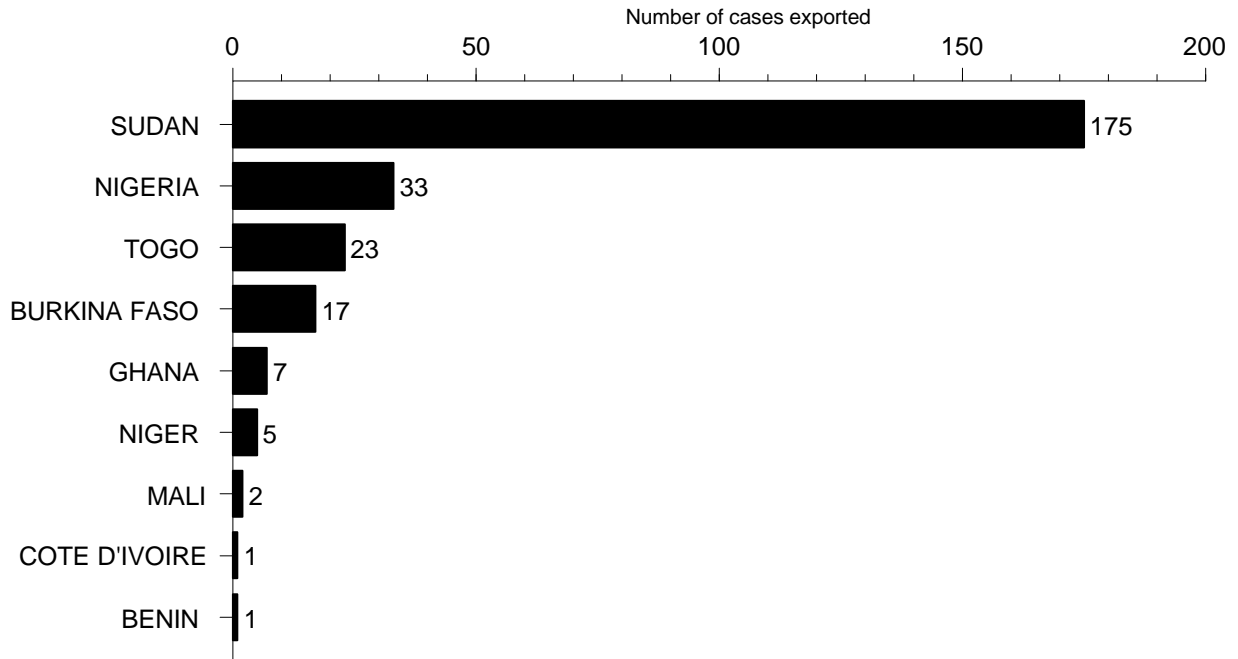


Figure 7

**Distribution by Country of Origin of 269 Cases of Dracunculiasis Exported to Other Countries During 1998**



*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.*

*The GW Wrap-Up is also available on the web at [http://www.cdc.gov/ncidod/dpd/list\\_drc.htm](http://www.cdc.gov/ncidod/dpd/list_drc.htm).*



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