DEPARTMENT OF HEALTH & HUMAN SERVICES

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

Memorandum

Date March 8, 1998

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

Subject GUINEA WORM WRAP-UP #76

To Addressees

Detect Every Case, Contain Every Worm!

1997 ENDEMIC VILLAGES REDUCED, CASES LEVEL OUTSIDE OF SUDAN

As provisional data in Table 1 indicate, all other endemic countries outside of Sudan reduced the total number of known villages where dracunculiasis occurred during 1997 to 3,691, compared to 4,497 known endemic villages during 1996, while the number of cases reported outside of Sudan remained about the same (Figures 1 & 2, Table 2). Al-though the overall total number of cases reported for 1997 amounts to less than 100,000 cases, the implied reduction from the 152,805 cases which were re-ported in 1996 (including 118,578 cases in Sudan) is more apparent than real. Whereas 34,226 cases were reported out-side of Sudan in 1996, a total of 33,089 cases have been provisionally reported outside of Sudan in 1997. Increased strife in endemic areas of the highest endemic country, Sudan, greatly reduced com-pleteness of reporting there in 1997 as compared to 1996, and three of the four other highest endemic countries (Nigeria, Ghana, Niger) recorded more cases in 1997 than in 1996 (Figure 2). Seventy-one percent of the cases outside of Sudan in 1997 were reportedly con-tained (Figure 3).

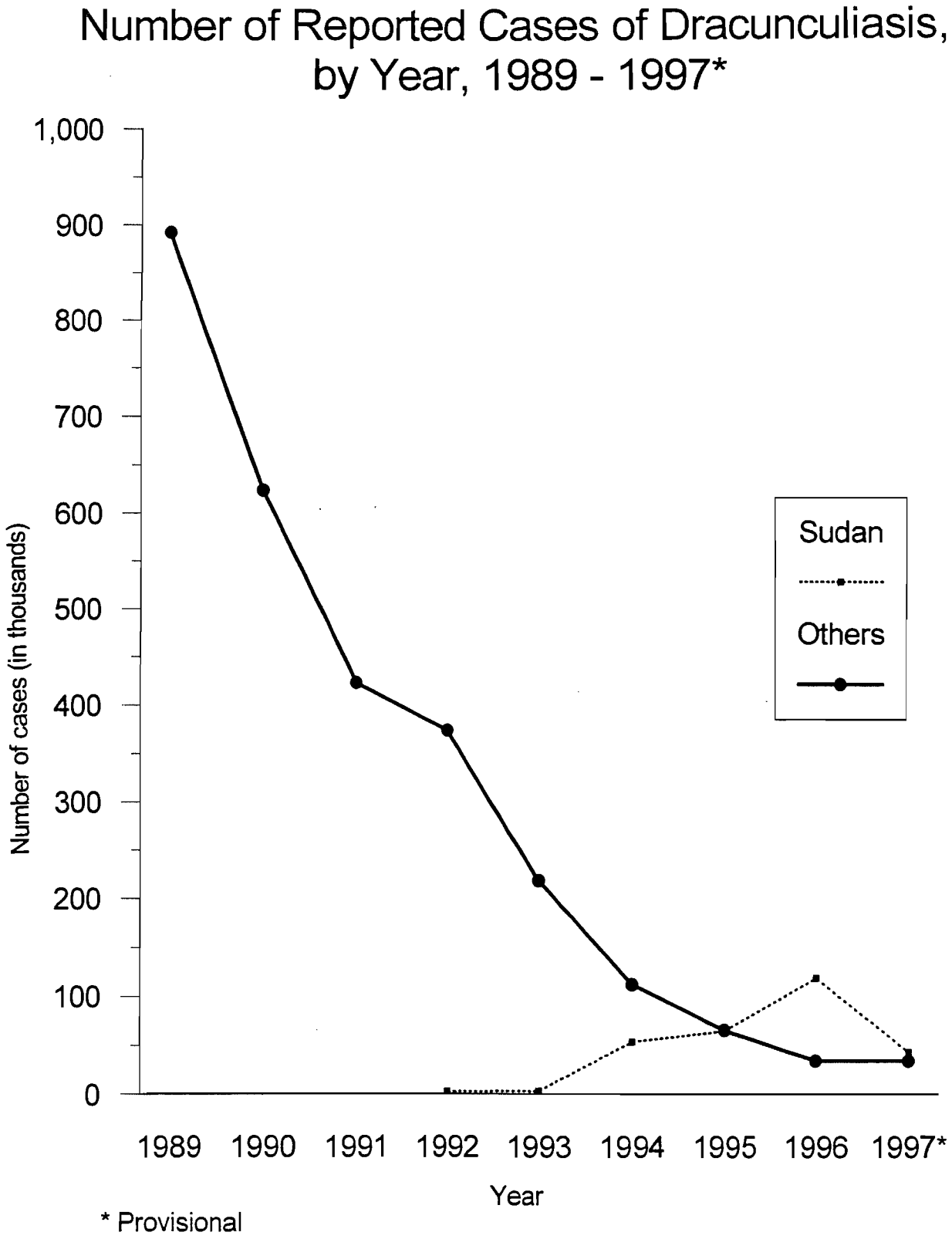
Number of Endemic Villages by Country and % Change:1996-1997*

Country	Number endemic		% Change
	as of 1/1/97	as of 1/1/98	
Sudan	5,114	5,730	12
Nigeria	1,353	1,135	-16
Ghana	602	765	27
Burkina Faso	337	210	-38
Niger	416	396	-5
Côte d'Ivoire	216	115	-47
Mali	430	269	-37
Togo	249	204	-18
Uganda	327	244	-25
Benin	325	212	-35
Mauritania	143	81	-43
Ethiopia	57	45	-21
Chad	12	8	-33
Yemen	7	5	-29
Senegal	7	1	-86
Cameroon	13	1	-92
India	3	0	-100
Total	9,611	9,421	-2
Total without Sudan	4,497	3,691	-18

* Provisional

Table 1

Figure 1

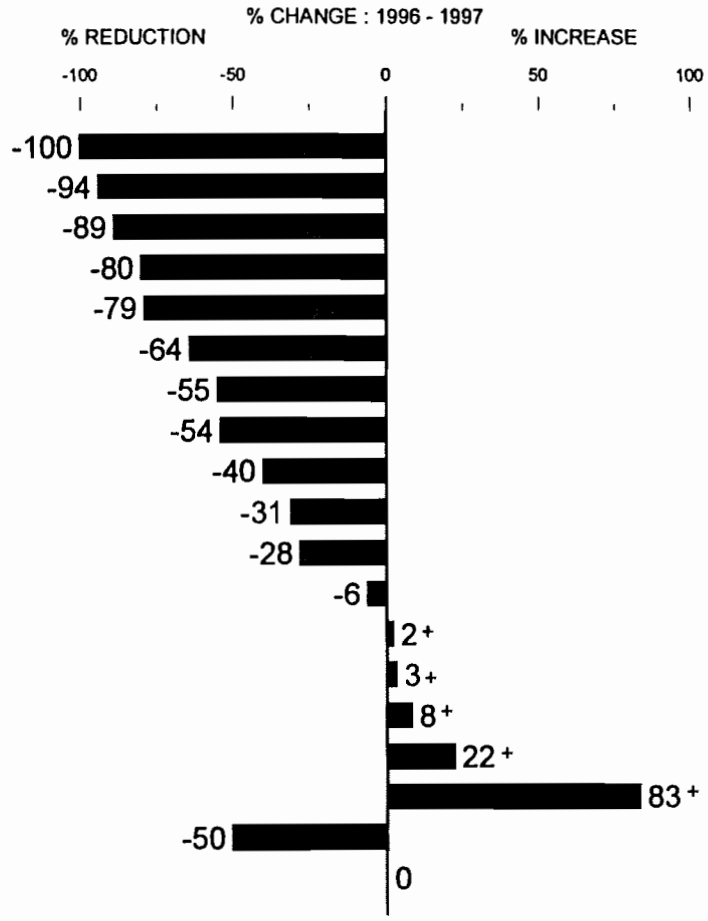


* Provisional

Figure 2

PERCENTAGE OF ENDEMIC VILLAGES REPORTING AND PERCENTAGE CHANGE IN NUMBER OF CASES OF DRACUNCULIASIS DURING 1996 AND 1997*, BY COUNTRY

COUNTRY	ENDEMIC VILLAGES: 1997 NUMBER	ENDEMIC VILLAGES: 1997 % REPORTING	CASES REPORTED 1996	CASES REPORTED 1997	% CHANGE : 1996 - 1997
INDIA (8)	3	100	9	0	-100
CAMEROON (11)**	13	100	16	1	-94
YEMEN (12)	9	100	62	7	-89
CHAD (12)	16	100	127	25	-80
SENEGAL (11)	7	100	19	4	-79
SUDAN (12)	5,730	34	118,578	43,034	-64
COTE D'IVOIRE (12)	115	93	2,794	1,254	-55
MALI (12)	423	85	2,402	1,099	-54
BENIN (12)	419	93	1,427	853	-40
MAURITANIA (12)	143	NR	562	388	-31
BURKINA FASO (12)	349	100	3,241	2,321	-28
UGANDA (12)	413	99	1,455	1,374	-6
NIGERIA (12)	1,709	96	12,282	12,583	2+
NIGER (12)	416	99	2,956	3,030	3+
TOGO (12)	204	91	1,626	1,762	8+
ETHIOPIA (12)	57	98	371	451	22+
GHANA (12)	1,134	100	4,877	8,921	83+
TOTAL***	11,005	61	152,804	77,123	-50
TOTAL (without Sudan ***)	5,275	93	34,226	34,089	0



* Provisional
(8) Reports for Jan. - Aug. 1997
(11) Reports for Jan. -Nov. 1997
(12) Reports for Jan. -Dec. 1997

NR Not Reported
** Reported 16 cases imported from Nigeria in 1997.
*** Includes 16 cases imported into Cameroon in 1997

Table 2

NUMBER OF CASES CONTAINED AND NUMBER REPORTED BY MONTH DURING 1997*
(COUNTRIES ARRANGED IN DESCENDING ORDER OF CASES IN 1996)

COUNTRY	# OF ENDEMIC VILLAGES: 1/1/97	# OF CASES IN 1996	NUMBER OF CASES CONTAINED / NUMBER OF CASES REPORTED													% CONT.
			JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL*	
SUDAN	5114	118578	1965 / 3595	862 / 1340	5603 / 8850	2621 / 7046	3264 / 7315	1967 / 2710	2088 / 2688	1785 / 3179	1531 / 2654	1032 / 1812	761 / 1285	267 / 560	23746 / 43034	55
NIGERIA	1353	12282	1056 / 1211	1406 / 1425	976 / 1117	806 / 918	952 / 1113	1089 / 1478	1150 / 1650	1016 / 1220	377 / 625	325 / 386	634 / 774	619 / 666	10406 / 12583	83
GHANA	602	4877	1498 / 1685	1182 / 1625	904 / 1226	680 / 909	583 / 652	272 / 376	194 / 274	73 / 97	53 / 69	123 / 162	422 / 808	605 / 1038	6589 / 8921	74
BURKINA FASO	337	3241	9 / 22	10 / 37	0 / 42	36 / 86	73 / 382	134 / 444	136 / 476	87 / 635	64 / 180	16 / 17	0 / 0	0 / 0	565 / 2321	24
NIGER	416	2956	3 / 7	0 / 0	2 / 4	5 / 14	33 / 59	218 / 435	312 / 731	500 / 857	315 / 485	127 / 236	71 / 121	27 / 81	1613 / 3030	53
COTE D'IVOIRE	216	2794	147 / 165	178 / 198	114 / 134	157 / 221	134 / 151	88 / 88	96 / 100	56 / 63	14 / 31	14 / 20	18 / 18	65 / 65	1081 / 1254	86
MALI	430	2402	27 / 44	11 / 11	4 / 4	10 / 21	24 / 31	78 / 107	134 / 182	199 / 315	134 / 190	53 / 101	16 / 73	6 / 20	696 / 1099	63
TOGO	249	1626	37 / 121	30 / 43	44 / 63	30 / 72	40 / 109	35 / 66	79 / 173	47 / 71	135 / 156	114 / 277	119 / 265	110 / 346	820 / 1762	47
UGANDA	327	1455	6 / 7	1 / 6	27 / 36	110 / 197	295 / 596	160 / 242	84 / 124	35 / 44	57 / 61	17 / 22	19 / 26	11 / 13	822 / 1374	60
BENIN	325	1427	98 / 112	38 / 41	15 / 19	74 / 79	28 / 30	17 / 18	4 / 10	18 / 21	38 / 39	88 / 91	133 / 193	178 / 200	729 / 853	85
MAURITANIA	143	562	2 / 2	1 / 1	1 / 1	7 / 10	6 / 6	8 / 11	34 / 55	103 / 129	63 / 83	/	/	76 / 90	301 / 388	78
ETHIOPIA	57	371	4 / 5	3 / 5	8 / 8	40 / 43	78 / 108	110 / 128	62 / 65	57 / 58	20 / 20	8 / 8	1 / 1	1 / 2	392 / 451	87
CHAD	12	127	2 / 2	2 / 2	6 / 6	1 / 1	1 / 1	2 / 2	0 / 3	2 / 8	0 / 0	0 / 0	0 / 0	0 / 0	16 / 25	64
YEMEN	7	62	0 / 0	0 / 0	0 / 0	1 / 1	2 / 4	1 / 1	0 / 0	0 / 0	0 / 1	0 / 0	0 / 0	0 / 0	4 / 7	57
SENEGAL	7	19	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	3 / 3	1 / 1	0 / 0	0 / 0	0 / 0	0 / 0	/	4 / 4	100
CAMEROON**	13	17	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 1	7 / 7	4 / 4	2 / 2	3 / 3	0 / 0	/	16 / 17	94
INDIA	3	9	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	/	/	/	/	0 / 0	-
TOTAL*	9611	152805	4854 / 6978	3724 / 4734	7704 / 11510	4578 / 9618	5513 / 10557	4182 / 6110	4381 / 6539	3982 / 6701	2803 / 4596	1920 / 3135	2194 / 3564	1965 / 3081	47800 / 77123	62
% CONTAINED			70	79	67	48	52	68	67	59	61	61	62	64	62	

* Provisional

** Reported 16 cases imported from Nigeria in 1997

Table 3

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

COUNTRY	# OF ENDEMIC VILLAGES 1/1/1998*	# OF CASES IN 1997*	NUMBER OF CASES CONTAINED / NUMBER OF CASES REPORTED													% CONT.
			JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL*	
SUDAN	5730	43034	/	/	/	/	/	/	/	/	/	/	/	/	0 / 0	-
NIGERIA	1023	12583	1982 / 2020	/	/	/	/	/	/	/	/	/	/	/	1982 / 2020	-
GHANA	765	8921	670 / 1277	/	/	/	/	/	/	/	/	/	/	/	670 / 1277	52
NIGER	396	3030	7 / 11	4 / 4	/	/	/	/	/	/	/	/	/	/	11 / 15	73
BURKINA FASO	210	2321	/	/	/	/	/	/	/	/	/	/	/	/	0 / 0	-
TOGO	204	1577	/	/	/	/	/	/	/	/	/	/	/	/	0 / 0	-
UGANDA	244	1374	7 / 8	/	/	/	/	/	/	/	/	/	/	/	7 / 8	88
COTE D'IVOIRE	115	1254	150 / 156	/	/	/	/	/	/	/	/	/	/	/	150 / 156	96
MALI	269	1099	/	/	/	/	/	/	/	/	/	/	/	/	0 / 0	-
BENIN	212	853	/	/	/	/	/	/	/	/	/	/	/	/	0 / 0	-
ETHIOPIA	45	451	1 / 1	6 / 6	/	/	/	/	/	/	/	/	/	/	7 / 7	100
MAURITANIA	81	388	/	/	/	/	/	/	/	/	/	/	/	/	0 / 0	-
CHAD	8	25	0 / 0	2 / 2	/	/	/	/	/	/	/	/	/	/	2 / 2	100
YEMEN	5	7	/	/	/	/	/	/	/	/	/	/	/	/	0 / 0	-
SENEGAL	1	4	/	/	/	/	/	/	/	/	/	/	/	/	0 / 0	-
CAMEROON**	1	17	/	/	/	/	/	/	/	/	/	/	/	/	0 / 0	-
INDIA	0	0	/	/	/	/	/	/	/	/	/	/	/	/	0 / 0	-
TOTAL*	9309	76938	2817 / 3473	12 / 12	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	2829 / 3485	81
% CONTAINED			81	100											81	

* Provisional

** Reported 16 imported cases in 1997

Figure 3

PERCENT OF CASES OF DRACUNCULIASIS CONTAINED DURING 1997* BY COUNTRY

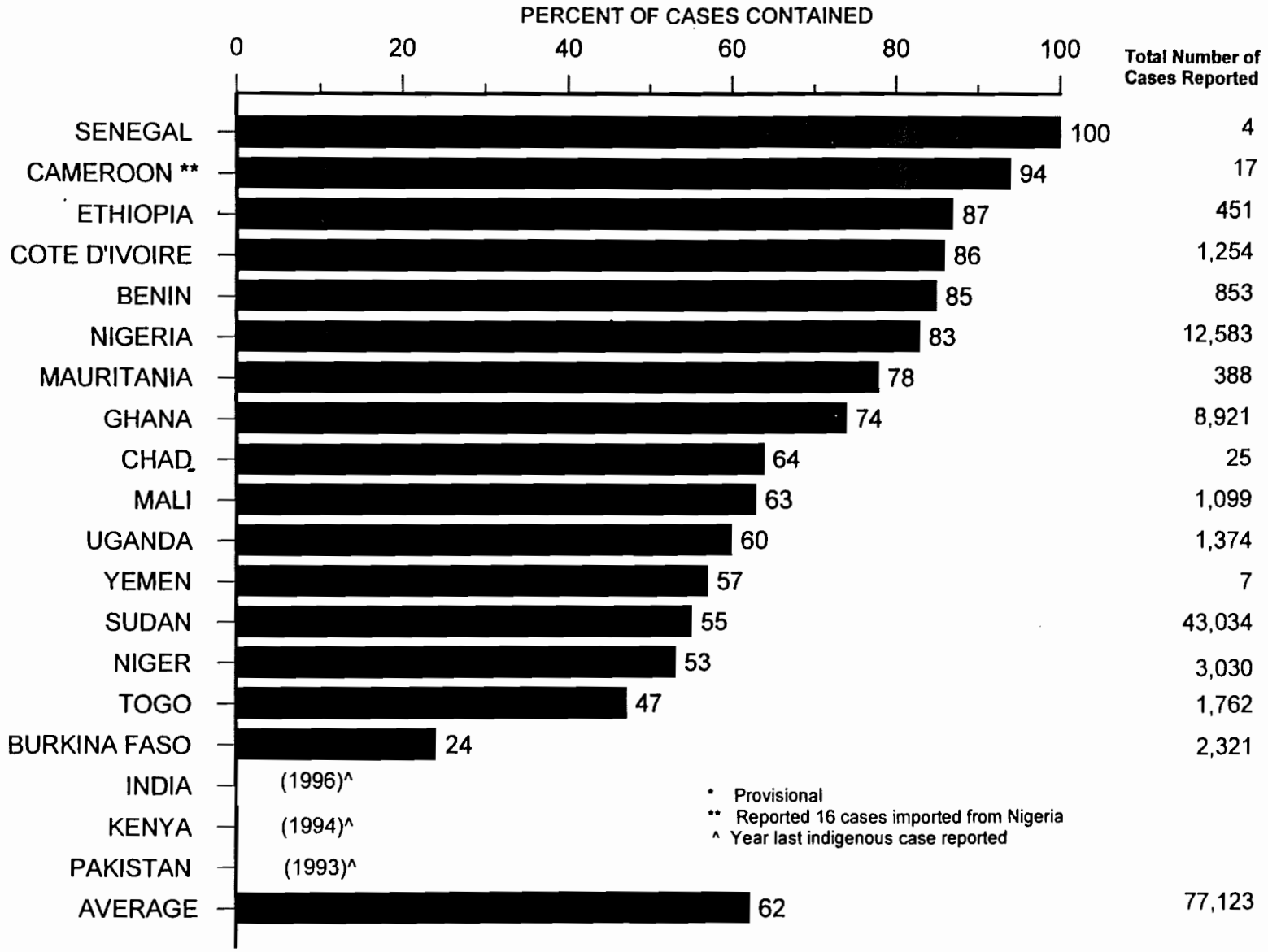
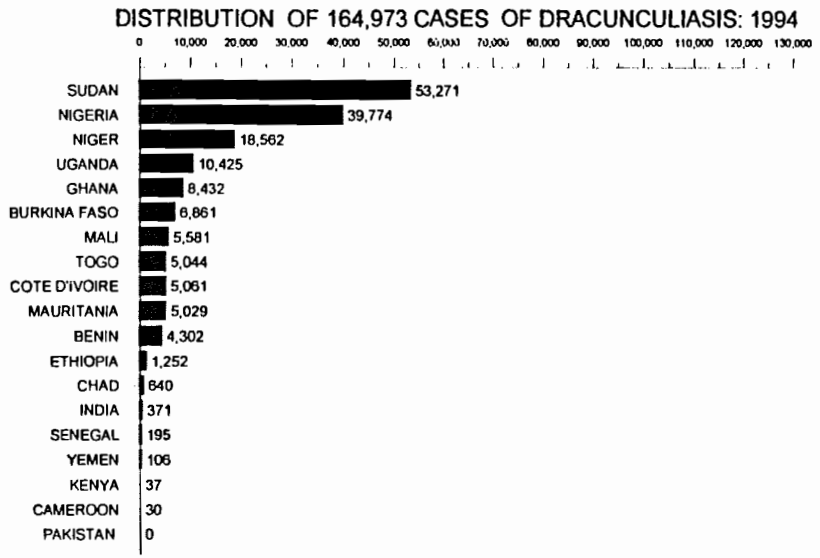
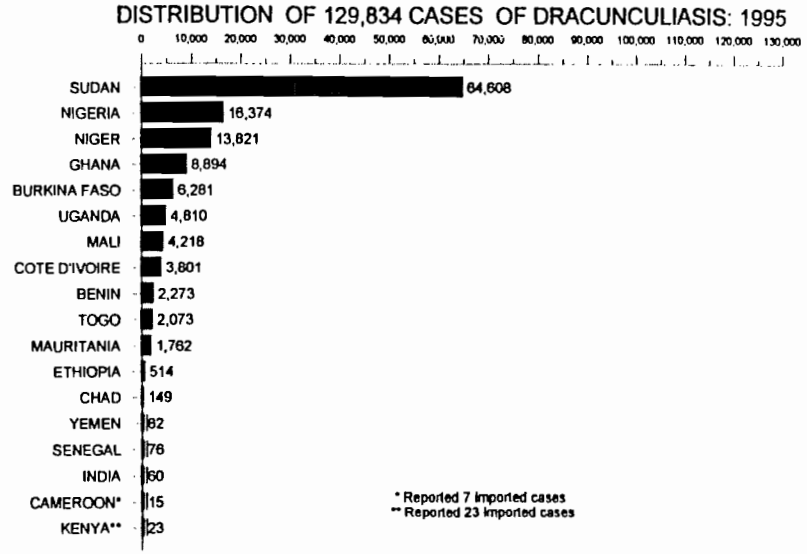
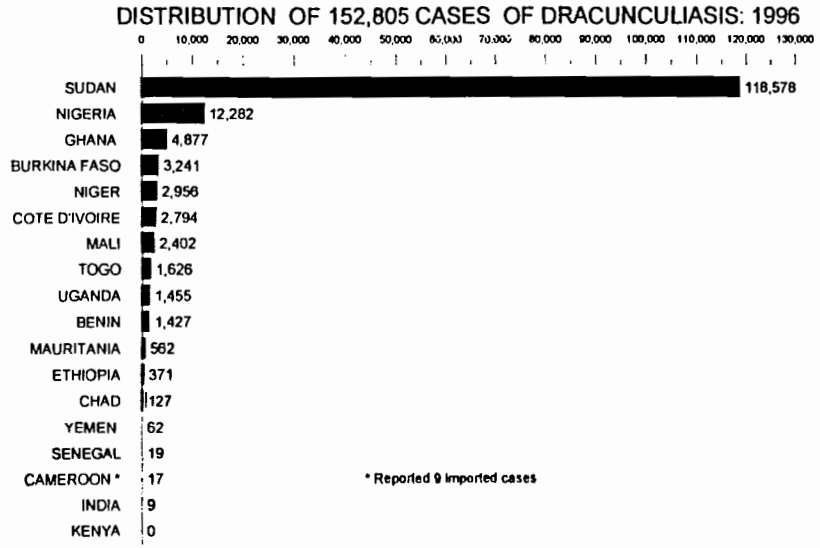
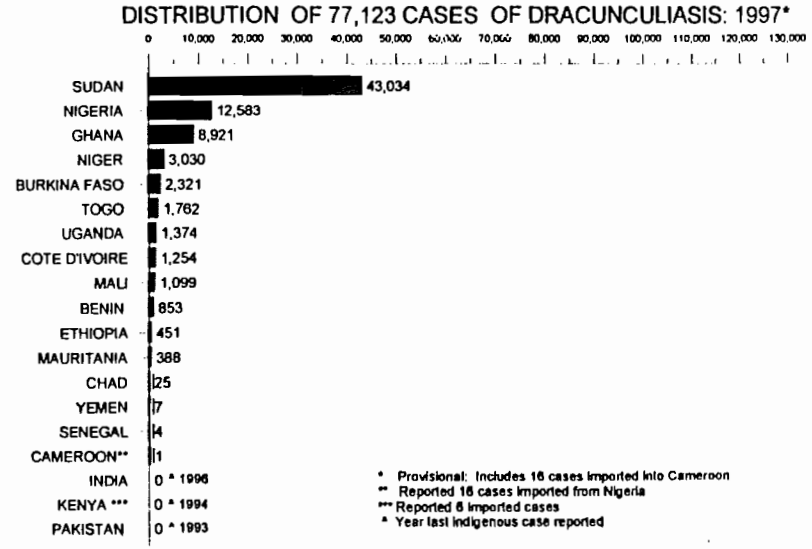


Figure 4


DISTRIBUTION OF 164,973 CASES OF DRACUNCULIASIS: 1994
0 10,000 20,000 30,000 40,000 50,000 60,000 70,000 80,000 90,000 100,000 110,000 120,000 130,000
SUDAN 53,271
NIGERIA 39,774
NIGER 18,562
UGANDA 10,425
GHANA 8,432
BURKINA FASO 6,861
MALI 5,581
TOGO 5,044
COTE D'IVOIRE 5,061
MAURITANIA 5,029
BENIN 4,302
ETHIOPIA 1,252
CHAD 640
INDIA 371
SENEGAL 195
YEMEN 106
KENYA 37
CAMEROON 30
PAKISTAN 0


DISTRIBUTION OF 129,834 CASES OF DRACUNCULIASIS: 1995
0 10,000 20,000 30,000 40,000 50,000 60,000 70,000 80,000 90,000 100,000 110,000 120,000 130,000
SUDAN 64,608
NIGERIA 16,374
NIGER 13,821
GHANA 8,894
BURKINA FASO 6,281
UGANDA 4,810
MALI 4,218
COTE D'IVOIRE 3,801
BENIN 2,273
TOGO 2,073
MAURITANIA 1,762
ETHIOPIA 514
CHAD 149
YEMEN 82
SENEGAL 76
INDIA 60
CAMEROON* 15
KENYA** 23
* Reported 7 imported cases
** Reported 23 imported cases


DISTRIBUTION OF 152,805 CASES OF DRACUNCULIASIS: 1996
0 10,000 20,000 30,000 40,000 50,000 60,000 70,000 80,000 90,000 100,000 110,000 120,000 130,000
SUDAN 118,578
NIGERIA 12,282
GHANA 4,877
BURKINA FASO 3,241
NIGER 2,956
COTE D'IVOIRE 2,794
MALI 2,402
TOGO 1,626
UGANDA 1,455
BENIN 1,427
MAURITANIA 562
ETHIOPIA 371
CHAD 127
YEMEN 62
SENEGAL 19
CAMEROON * 17
INDIA 9
KENYA 0
* Reported 9 imported cases


DISTRIBUTION OF 77,123 CASES OF DRACUNCULIASIS: 1997*
0 10,000 20,000 30,000 40,000 50,000 60,000 70,000 80,000 90,000 100,000 110,000 120,000 130,000
SUDAN 43,034
NIGERIA 12,583
GHANA 8,921
NIGER 3,030
BURKINA FASO 2,321
TOGO 1,762
UGANDA 1,374
COTE D'IVOIRE 1,254
MALI 1,099
BENIN 853
ETHIOPIA 451
MAURITANIA 388
CHAD 25
YEMEN 7
SENEGAL 4
CAMEROON** 1
INDIA 0 ^ 1996
KENYA *** 0 ^ 1994
PAKISTAN 0 ^ 1993
* Provisional: Includes 16 cases imported into Cameroon
** Reported 16 cases imported from Nigeria
*** Reported 6 imported cases
^ Year last indigenous case reported

GHANA: CASES DECLINE IN NORTHERN REGION; IMPORTATION FROM LIBYA

Data for January 1998 show that the number of cases reported from Ghana's Northern Region amounted to 778, or 61% of all cases reported by Ghana that month. This is a reduction of 50% from the 1,560 cases reported from Northern Region in January 1997, and it is the first significant reduction in cases from that Region, which reported two-thirds of Ghana's cases in 1997, in over a year. This reduction comes one year after regional authorities began using Abate in late January 1997 to treat the contaminated dams that are the sources of drinking water for several district capitols (see Guinea Worm Wrap-Up #71). This region reportedly contained 100% of its cases in October and November 1997 and 87% in December, but only 53% in January 1998.

Agence canadienne de développement international

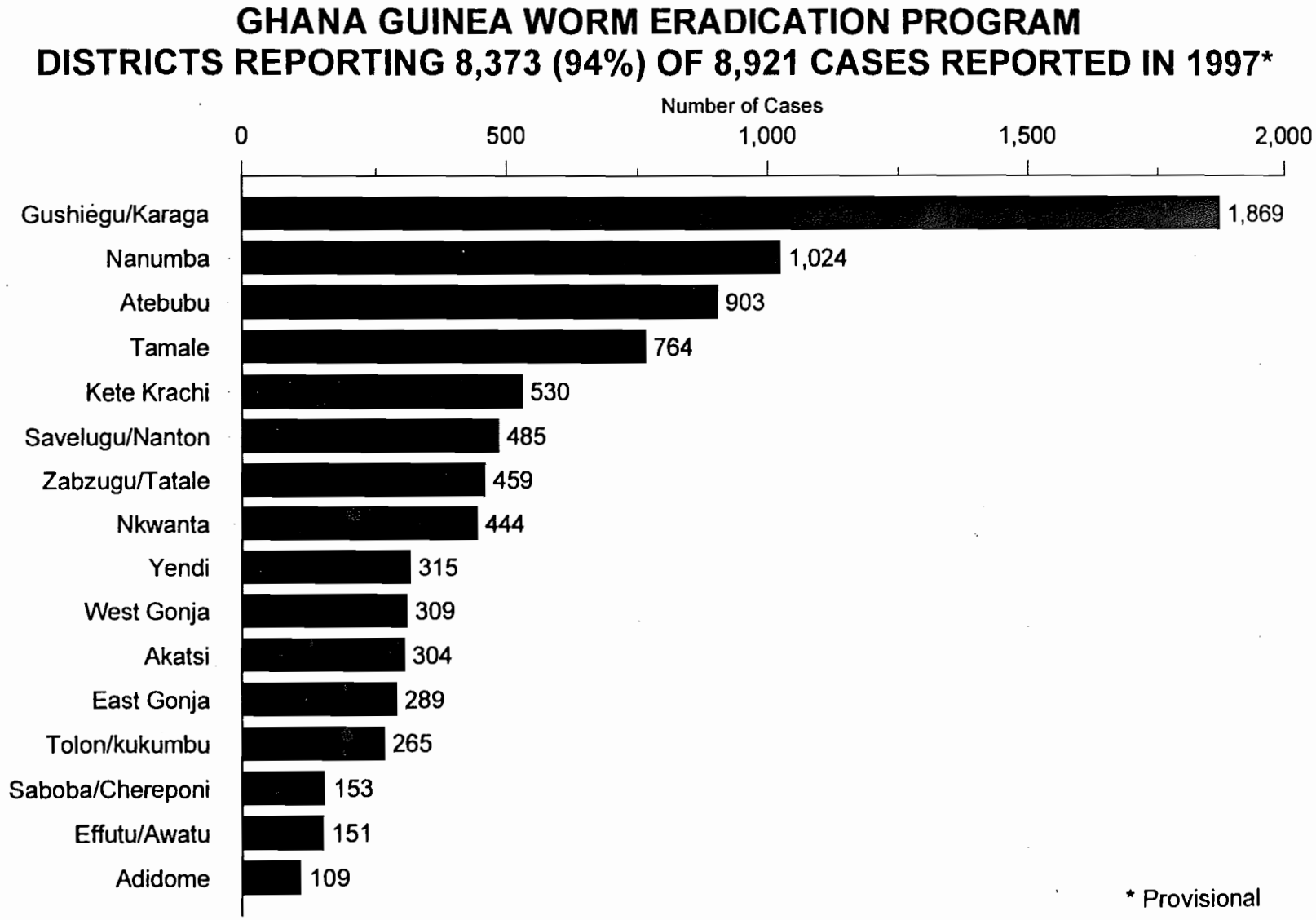
Early this year, the Canadian International Development Agency (CIDA) project in the town of Gushiegu (capitol of Gushiegu-Karaga District in Northern Region) successfully drilled three borehole wells with enough yield to supply Gushiegu and more. Last year, Gushiegu-Karaga District was the highest endemic district in Ghana (Figure 5). UNICEF and World Vision are considering ways to provide safe water to two or three other district capitols in Northern Region.

A survey of a sample of 25 villages, which had only one case of dracunculiasis in 1997 that was conducted by Northern Region senior medical officer for public health Dr. A. Seidu and the regional Guinea worm coordinator Mr. Patrick Apoya, found that 68% of the villages had not had a case of dracunculiasis in 1996, 92% of the cases were adults, 60% were male, and 88% of the 25 cases were residents of the village, not visitors or strangers. In a separate sample of 37 villages which were "new" endemic villages in 1997 (i.e., did not have a case in 1996), they found that 54% were one-case villages, 72% of the cases were adults, 53% were males, and at least two-thirds of the cases were linked to visits to one or more of the district capitols with contaminated water souces.

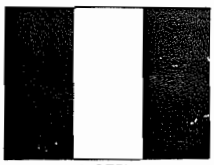
Ghana's GWEP continues to try to address the outbreaks discovered in Volta and Brong-Ahafo Regions in February and November 1997, respectively. However, national suppport for interventions and supervision is being hampered by inaccessible funding associated with the introduction of a new budgetary system at the beginning of this Fiscal Year on January 1, which unfortunately also coincided with Ghana's peak transmission season for dracunculiasis. Global 2000 and the WHO office in Ghana have provided some temporary stop gap funding to help mitigate this serious problem. Another important problem is the lack of a deputy program coordinator to supervise and oversee program activities on behalf of the national ministry of health, now that the national program coordinator, Dr. Sam Bugri, has been promoted and has many other responsibilities.

Meanwhile, Ghanaian health authorities are investigating the case of a man with one emerged Guinea worm and another pre-emergent worm who was detected in Bolgatanga District, Upper East Region in January 1998. The patient claimed to have been a resident in "Sabaha", Libya, from September 1996 through August 1997, and he alleged that Guinea worms were common in that town. He reportedly returned to Ghana in January 1998 shortly before his worms began to emerge. Upper East Region has had no known indigenous case of dracunculiasis for more than three years. Preliminary information on this case has been provided to the Dracunculiasis Unit at WHO headquarters. In 1995, an alleged focus of indigenous transmission of dracunculiasis was reported by Libyan researchers to have occurred in mid-1993 in North-West part of Libya as a result of an importation by a Chadian shepherd (see GW Wrap-Up #53). As far as we are aware, the 1995 report was never investigated further or confirmed.

Figure 5


GHANA GUINEA WORM ERADICATION PROGRAM
DISTRICTS REPORTING 8,373 (94%) OF 8,921 CASES REPORTED IN 1997*
Number of Cases
0
500
1,000
1,500
2,000
Gushiegu/Karaga
1,869
Nanumba
1,024
Atebubu
903
Tamale
764
Kete Krachi
530
Savelugu/Nanton
485
Zabzugu/Tatale
459
Nkwanta
444
Yendi
315
West Gonja
309
Akatsi
304
East Gonja
289
Tolon/kukumbu
265
Saboba/Chereponi
153
Effutu/Awatu
151
Adidome
109
* Provisional

NIGERIA: SOUTHEAST ZONE CASES REMAIN HIGH, WATER SUPPLY INCREASING



In October 1997-January 1998, Nigeria's Southeast Zone has reported 2,283 cases, as compared to 1,651 cases the year before, according to reports by Prof. Eka Braide, the Zonal Facilitator. So far, 97% of this epidemiologic year's cases were reportedly contained. In December 1997, UNICEF transferred a drilling rig to Ebonyi State, the most endemic state in the country, where by late January it was averaging one borehole per day, and had already drilled 23 wells. Newly mobilized inhabitants of endemic villages in the Southeast Zone have also now dug over 400 hand-dug wells in the past few years, with concrete parapets and hand pumps provided by Global 2000 and UNICEF. Over the past few years, however, the Nigerian program has suffered increasingly from inadequate funding and support at national and local government levels. The numbers of cases reported by states in 1997 are shown in Figure 6.

In January, the Nigerian program held the first meeting of its Steering Committee at Enugu, which was attended by Dr. Stella Goings and Mr. Ali Mansour of UNICEF/Nigeria, Dr. Nevio Zagaria of WHO, and Mr. Wayne Duncan and Dr. Donald Hopkins of The Carter Center/Global 2000. A meeting of the Southeast Zone Guinea Worm Task Force was held the next day. During the current peak transmission season in the southern part of the country so far (October-January), Oyo State in Southwest Zone reports 1.7 times as many cases as a year ago. Officials from Northeast Zone held the latest monthly border meeting on dracunculiasis eradication with counterparts from Cameroon at the Amchide health post in Cameroon on February 4. The next cross-border meeting is scheduled for March 11 in Bama, Nigeria.

SUDAN: SOUTH KORDOFAN ENDEMIC STATUS INVESTIGATED

In January, Mr. Abdel Gadir El Sid, consultant to the Sudan GWEP, visited South Kordofan, West Kordofan, and White Nile States to review the status of dracunculiasis eradication activities there. This supervisory visit was important because 12 years ago, South Kordofan (Nuba Mountains) had several highly endemic villages, but has been inaccessible to the program until recently because of insecurity. A few areas of Kadugli Province in South Kordofan, including the areas of Shat and Fama where all cases detected in the state apparently originate, are still inaccessible. It appears, however, that cases are much reduced from 12 years ago. Filters were previously distributed to other endemic villages in the state in May 1997. The visits to West Kordofan and White Nile States were in follow up to visits by the national coordinator, Dr. Nabil Aziz, in December 1997. Dr. Nabil also visited Sennar State in January. Sennar, White Nile, and North Darfur all reported little or no decrease in cases between 1996 and 1997, despite an overall decrease in cases in the ten northern states.

In February, leaders of the dracunculiasis eradication program and the minister of health for Jongoli State met with Dr. Riak Machar, Assistant President and Chairman, Southern Coordinating Council, and discussed arrangements for greater access to endemic areas in Upper Nile Zone. Overall, monthly reporting from both sides of the Sudan GWEP was received from only 34% of the 5,730 known endemic villages in 1997, compared to 44% of endemic villages in 1996. A little more than 500,000 cloth filters, plus over 53,000 pipe filters, were distributed to endemic villages throughout Sudan in 1997 (vs. about 617,000 filters distributed in 1996). On the side of Operation Lifeline Sudan (OLS), the cost of manufacturing a cloth filter now averages about US $0.97 each. The Government of Qatar recently donated $500,000 to The Carter Center for its work in Sudan, mostly in support of Guinea worm eradication.

Figure 6

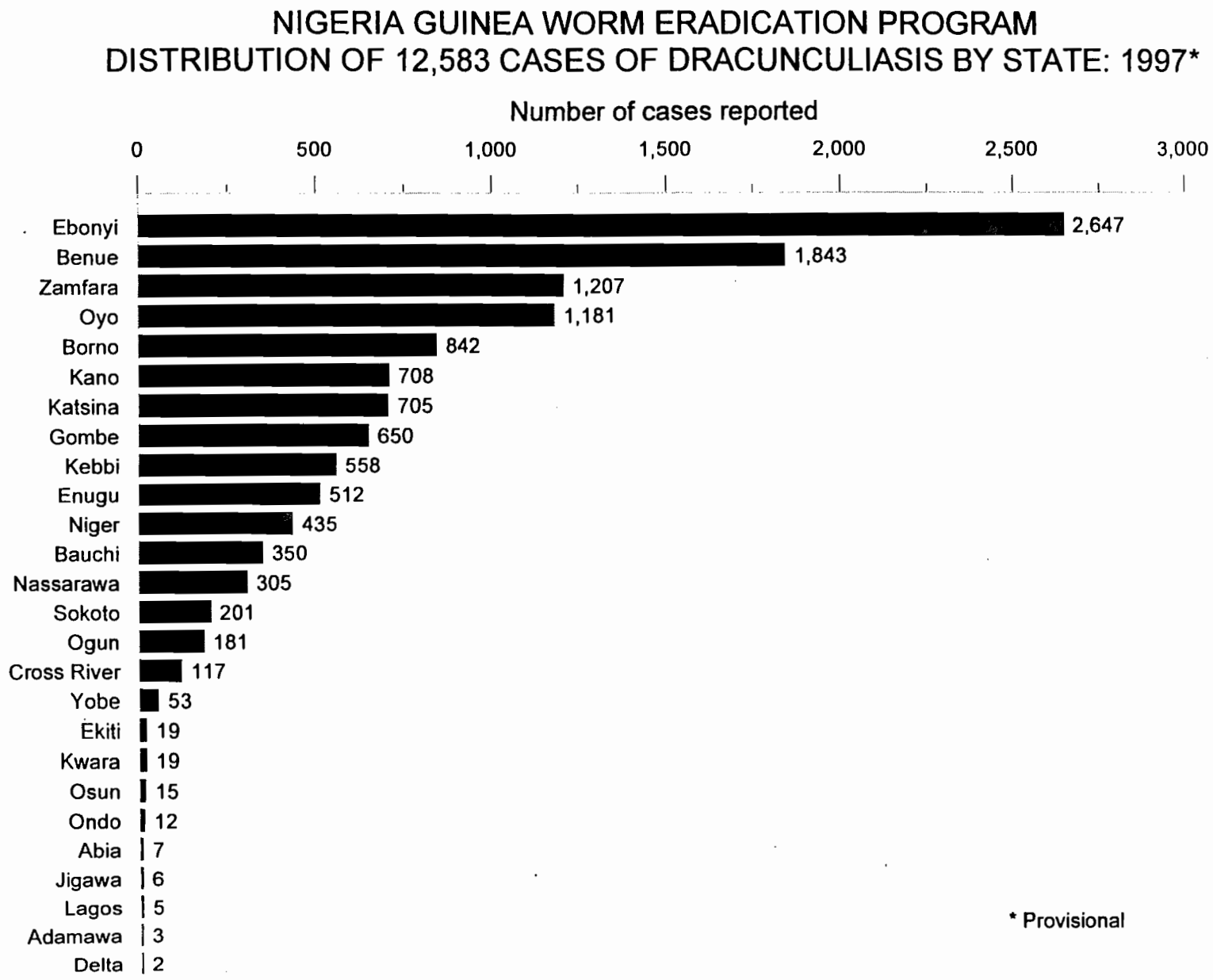

NIGERIA GUINEA WORM ERADICATION PROGRAM
DISTRIBUTION OF 12,583 CASES OF DRACUNCULIASIS BY STATE: 1997*
Number of cases reported
0
500
1,000
1,500
2,000
2,500
3,000
Ebonyi 2,647
Benue 1,843
Zamfara 1,207
Oyo 1,181
Borno 842
Kano 708
Katsina 705
Gombe 650
Kebbi 558
Enugu 512
Niger 435
Bauchi 350
Nassarawa 305
Sokoto 201
Ogun 181
Cross River 117
Yobe 53
Ekiti 19
Kwara 19
Osun 15
Ondo 12
Abia 7
Jigawa 6
Lagos 5
Adamawa 3
Delta 2
* Provisional

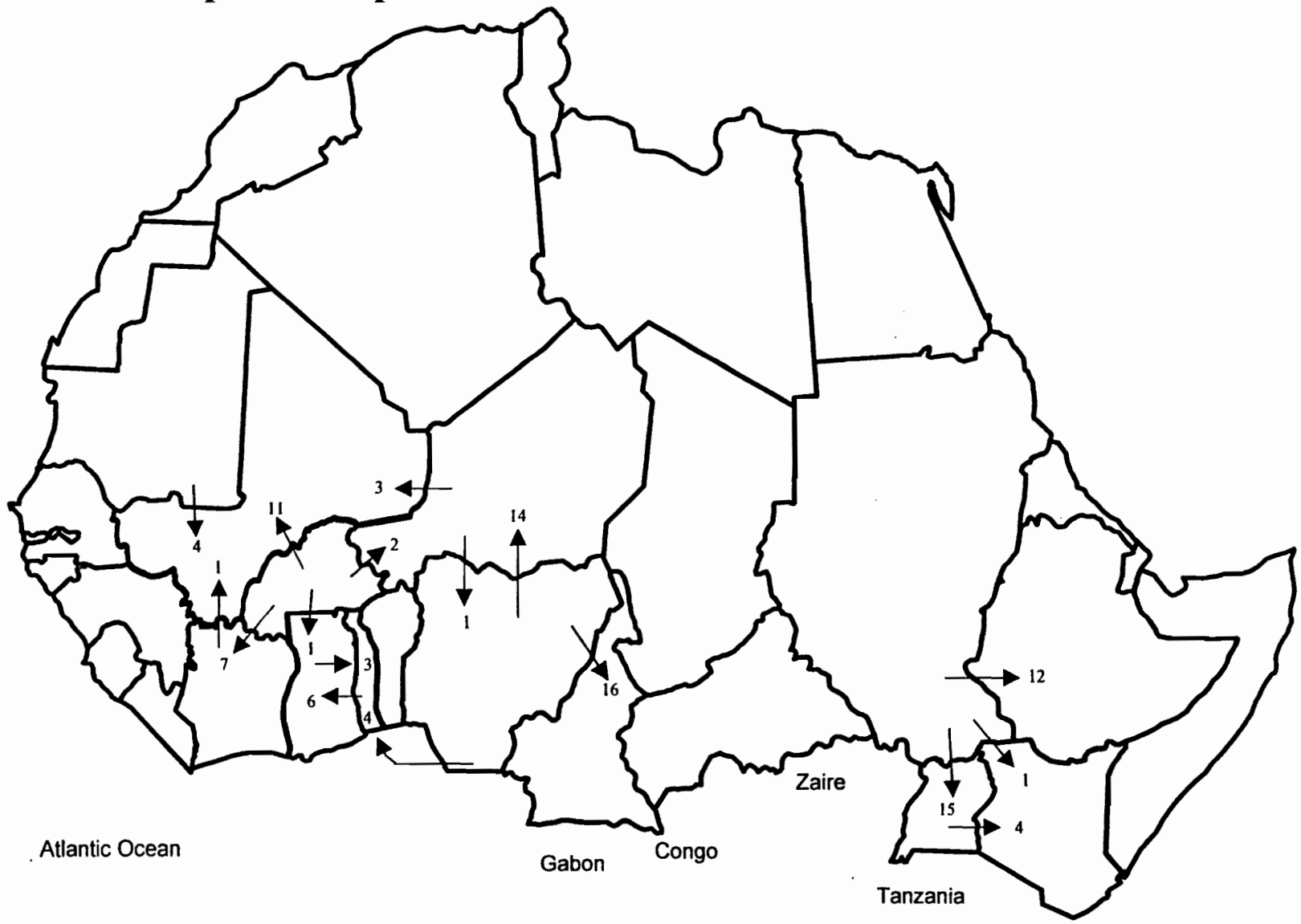
Table 4

Dracunculiasis Eradication Campaign
Reported Importations of Cases of Dracunculiasis: 1997

From	To	Cases			
		Month	Number	Contained	Cross notified
Burkina Faso	Mali	January	2	2	0
		June	1	1	1
		July	3	0	3
		September	2	0	2
		October	1	0	1
		December	2	0	?
	Cote d'Ivoire	May	1	1	1
		August	6	6	6
	Niger	May	1	0	1
		July	1	0	0
	Ghana	September	1	1	1
Cote d'Ivoire	Mali	June	1	1	0
Ghana	Togo	January	3	1	3
Mauritania	Mali	October	2	2	2
		November	2	0	2
Niger	Nigeria	July	1	1	1
	Mali	July	2	0	0
		October	1	0	1
Nigeria	Niger	March	1	1	1
		April	2	2	2
		June	1	1	0
		July	8	1	8
		August	1	1	1
		September	1	1	1
	Cameroon	June	1	0	1
		July	7	7	7
		August	4	4	3
		September	2	2	5
		October	2	2	?
	Togo	??	4	?	?
Togo	Ghana	January	3	3	3
		March	1	1	1
		October	1	1	1
		November	1	1	1
Sudan	Uganda	March	3	3	3
		July	6	3	6
		August	3	2	3
		October	1	0	1
		November	1	0	1
		December	1	0	1
	Ethiopia	February	2	2	0
		March	2	2	2
		April	1	1	0
		May	2	0	2
		August	2	2	0
		September	2	2	0
		October	1	1	1
	Kenya	August	1	1	1
Uganda	Kenya	January	1	1	0
		June	2	2	0
		July	1	1	0
Total			105	67	81

Figure 7

Dracunculiasis Eradication Campaign
Reported Importations of Cases of Dracunculiasis: 1997



CERTIFICATION COMMISSION HOLDS THIRD MEETING IN GENEVA

The Third Meeting of the International Commission for the Certification of Dracunculiasis Eradication (ICCDE-3) was held at WHO headquarters in Geneva on February 19-20, 1998. The ICCDE evaluated documents from over 98 additional countries, territories, and areas requesting certification of absence of transmission and recommended to the Director General of the World Health Organization that 88 of these be certified free of transmission. These included five African countries: Botswana, Egypt, Seychelles, Tunisia, and Zimbabwe. A summary of this meeting was published in the Weekly Epidemiological Record (see Recent Publications). Dr. Alhousseini Maiga represented WHO/AFRO and Dr. Ernesto Ruiz-Tiben represented The Carter Center (Global 2000) and CDC's WHO Collaborating Center at this meeting.

IN BRIEF:

Mali. During a careful investigation of the dracunculiasis problem in Gossi, the arrondissement which includes 85% of the cases in Timbuktu Region, the Malian GWEP and the medecin chef of Gourma-Rharous discovered that although many local marshes are too large to treat with Abate, those are the marshes where endemic populations migrate during the dry season, when incidence is lowest. During the peak transmission-rainy season, such populations have returned to places where they raise crops and tend their animals, and are then using sources of drinking water that are more amenable to treatment with Abate. (Other programs are encouraged to emulate this example of careful study to determine vulnerable points in local epidemiology.)

Ethiopia. A regional meeting of the Dracunculiasis Eradication Program in South Omo was held at Jinka on February 10-11. Global 2000 resident technical advisor Mr. Teshome Gebre and CDC consultant Dr. Karl Kappus attended.

Uganda. Dr. John Bosco Rwakimari has been designated National Coordinator of the Guinea Worm Eradication Program in Uganda. Dr. Rwakimari is currently a senior medical officer with the Ministry of Health, and was formerly the Technical Assistant to the Director General of Health. ***Welcome Dr. Rwakimari!***

CONFERENCE ON GLOBAL DISEASE ELIMINATION AND ERADICATION AS PUBLIC HEALTH STRATEGIES MEETS IN ATLANTA

More than 200 scientists and other experts met at Emory University in Atlanta on February 23-25 for the Conference on Global Disease Elimination and Eradication as Public Health Strategies. The meeting was conceived as a follow up to the smaller Workshop on the Eradication of Infectious Diseases, which met in Dahlem (Berlin) in March 1997. CDC was among the sponsors of the Conference, which also included WHO, UNICEF, UNDP, The World Bank, Emory University's Rollins School of Public Health, The Carter Center, and the Task Force for Child Survival and Development, among others. Participants reviewed the current status of the campaigns to eradicate dracunculiasis and polio, and considered other potential candidate diseases for eradication. They agreed that eradication programs are not responsible for, and cannot alone correct, the shortcomings of existing health services. There was also much constructive discussion of how eradication programs and primary health care programs can complement each other. Dr. Donald Hopkins of The Carter Center presented a paper on perspectives of the Dracunculiasis Eradication Program at the opening plenary session. The Proceedings of the conference will be published in the Bulletin of the World Health Organization.

NOTE TO READERS
Because the relevant office at CDC was in the process of moving last month, this is the first issue of Guinea Worm Wrap-Up since Issue #75, dated January 12, 1998.

RECENT PUBLICATIONS

Akinsola HA, Kale OO, 1997. Copepod filters for guinea-worm control - users have their say. World Hlth Forum, 18:270-273.

Bapna S, Renapurkar DM, 1996. Immunodiagnosis of early dracunculiasis. J Comm Dis (Delhi), 28:33-37.

Brieger WR, Otusanyua S, Adeniyi JD, Tijani J, Banjoko M, 1997. Eradicating Guinea worm without wells: unrealized hopes of the water decade. Hlth Pol & Planning, 32:354-362.

Guthmann JP, Mercer AJ, Gandubert C, Morin F, 1996. Guinea worm disease in Ayod, Upper Nile Province, southern Sudan: a cross-sectional study. Trop Med Int'l Hlth, 1:117-123.

Kim A, Tandon A, Ruiz-Tiben E, 1997. Cost-benefit analysis of the global dracunculiasis eradication campaign. Policy Research Working Paper No. 1835. Washington, DC: The World Bank, 16pp.

Watts S, 1996. No transmission of dracunculiasis in Egypt for two centuries. World Hlth Forum, 17:181-183.

WHO, 1998. Dracunculiasis - certification of transmission-free status. Wkly Epidemiol Rec, 73:68-70.

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Inclusion of information in the Guinea Worm Wrap-Up does not constitute "publication" of that information.
In memory of BOB KAISER

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