DEPARTMENT OF HEALTH & HUMAN SERVICES

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

Memorandum

Date May 11, 1998

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

Subject GUINEA WORM WRAP-UP #78

To Addressees

Detect Every Case, Contain Every Worm!

BENIN TARGET FOR LAST CASES: 1999. WHAT'S YOURS?

At the 7th African Regional Conference on Dracunculiasis Eradication held in Bamako last month, Benin's Guinea Worm Eradication Program announced their goal of stopping all further transmission of the disease in Benin by the end of next year, 1999. This was in keeping with the general consensus at Bamako that Guinea Worm Eradication Programs and their partners should mobilize and aim to stop transmission in all remaining areas outside of Sudan within the next two years. After a difficult and prolonged beginning, Benin's program is gaining ground rapidly, having reduced the number of reported cases by 40% in 1997. With 853 cases reported in 1997, Benin had almost as many cases as Ethiopia (451) and Mauritania (459) combined. The key question, then, is: When do Mauritania, Ethiopia, Mali, Côte d'Ivoire, Uganda, Togo, Burkina Faso, Niger, Ghana, and Nigeria aim to stop transmission of dracunculiasis? Whatever the answer, there is a lot of work to be done in each of those countries, as well as in Benin (which reports a containment rate of 81% so far this year), starting now (Figures 1 and 2).

Figure 1

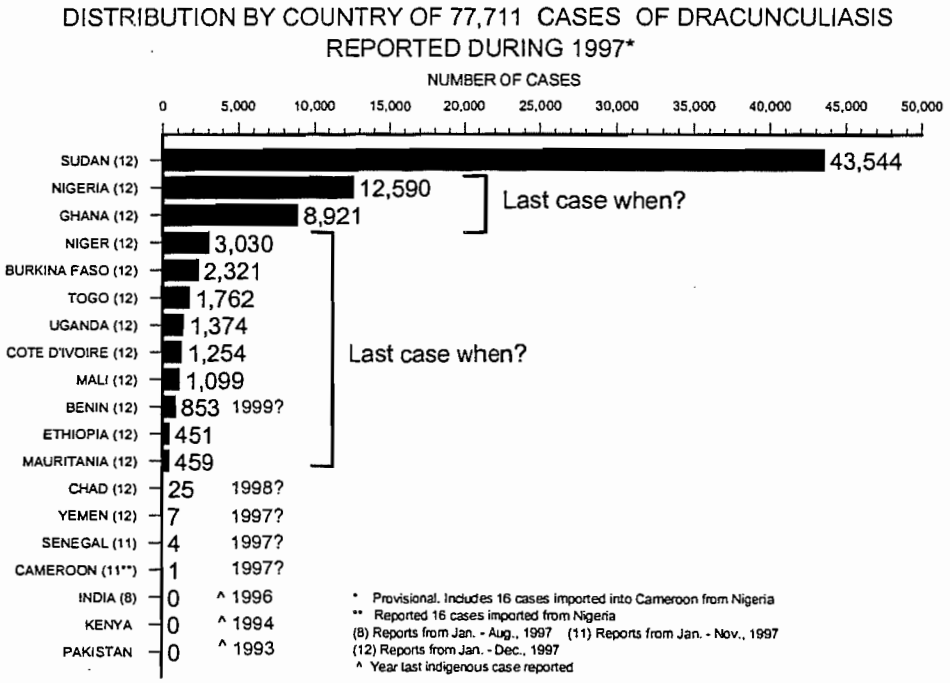
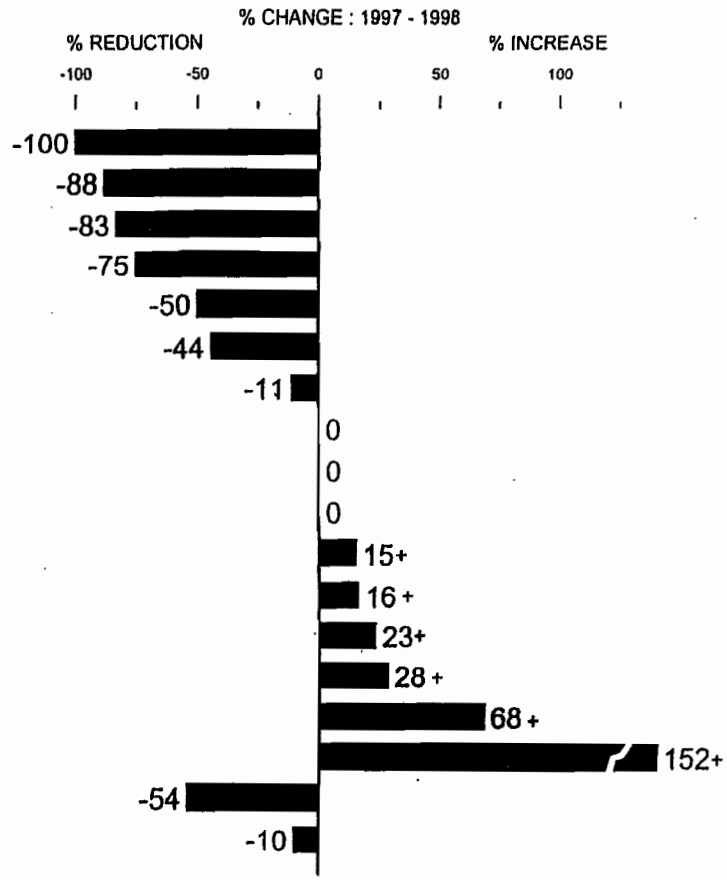


Figure 2

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

COUNTRY	ENDEMIC VILLAGES: 1998 NUMBER	ENDEMIC VILLAGES: 1998 % REPORTING	CASES REPORTED 1997	CASES REPORTED 1998	% CHANGE : 1997 - 1998
MAURITANIA (3)	83	84	4	0	-100
BURKINA FASO (2)	211	NR	60	7	-88
SUDAN (3)	5790	12	13785	2291	-83
MALI (3)	259	75	59	15	-75
CHAD (2)	10	100	4	2	-50
GHANA (3)	951	100	4536	2540	-44
BENIN (2)	212	95	153	135	-11
CAMEROON (2)	1	100	0	0	0
SENEGAL (2)	1	100	0	0	0
YEMEN (3)	5	100	0	0	0
COTE D'IVOIRE (3)	116	100	497	573	15+
UGANDA (3)	244	99	49	57	16+
NIGERIA (3)	1307	99	3753	4603	23+
ETHIOPIA (4)	48	100	61	78	28+
TOGO (3)	204	NR	227	381	68+
NIGER (3)	396	99	25	63	152+
TOTAL*	9838	44	23213	10746	-54
TOTAL (without Sudan)*	4048	97	9428	8455	-10



* Provisional
(3) Denotes number of months for which reports were received, e.g., Jan. - Mar., 1998
NR Not Reported

As reported previously, 6 of the 18 remaining endemic countries were at or on the verge of eradication in 1997, following the certification of Pakistan. Kenya's last known indigenous case was in May 1994, and India's in July 1996. Cameroon, Senegal, Yemen, and Chad reported only 1, 4, 7, and 25 indigenous cases, respectively, in 1997. Chad has had two cases so far in 1998; India, Cameroon, Senegal, and Yemen have had none (they also had no cases during the first three months of 1997). Thus, India appears to have interrupted transmission in 1996; Cameroon, Senegal, and Yemen may have stopped transmission in 1997; and Chad may have its last case in 1998 (Figure 1).

IN BRIEF:

Ghana reported 55% fewer cases overall in March 1998 compared to March 1997. The Northern Region's reported cases are down 60% for March, and 56% for the first three months of 1998. The number of endemic villages in Ghana so far this year is 455 (186, or 41% of them previously uninfected), compared to 525 villages (297, or 57% previously uninfected) that had reported one or more cases during the first three months of 1997, for a reduction of 13% in the number of endemic villages so far this year. See Figure 3.

Nigeria. The numbers of cases reported by Enugu and Ebonyi States (which formerly were Enugu State) of Nigeria during the three most recent epidemiological years (1995-96, 1996-97, 1997-98) are illustrated in Figure 3. This shows the urgent need to deal more effectively with the residual transmission of dracunculiasis in the most highly endemic focus remaining in Nigeria. Earlier this month, UNICEF/Nigeria transported 55 pails of donated Abate and 27 rolls of donated nylon filter material to Nigeria from Ghana.

Mali. For the first time since the Guinea Worm Eradication Program began in 1993, Mali has reported zero cases of dracunculiasis for an entire month: March 1998. ***Congratulations to Dr. Degoga and his team!***

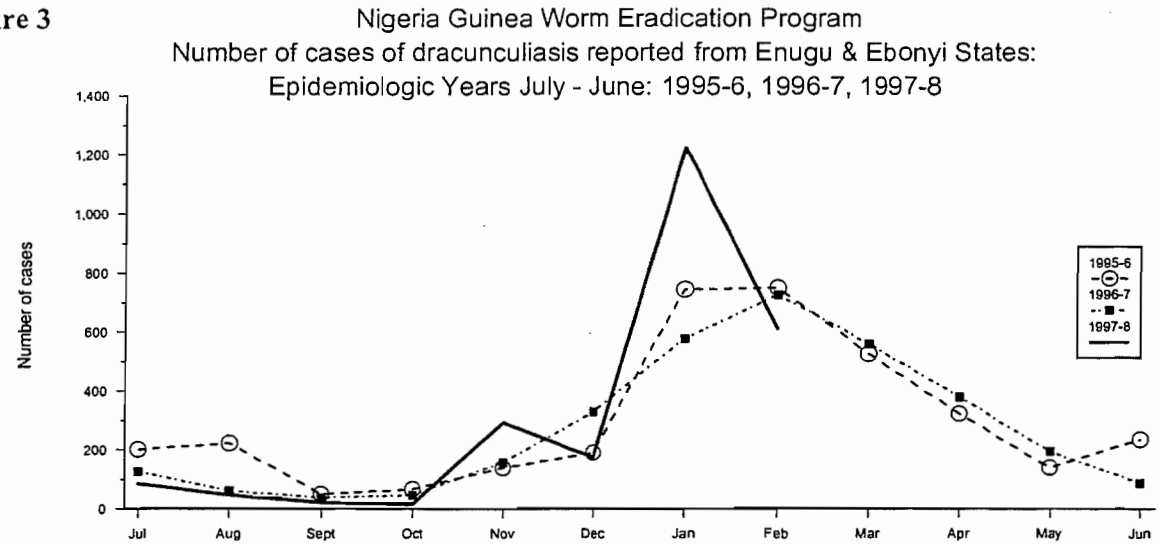
Villages with only one case. Table 2 summarizes the proportion of 3,764 "endemic villages" (villages which reported one or more cases of dracunculiasis in 1997) outside of Sudan that had only one case of Guinea worm disease reported last year. On average, nearly one third of those villages were single case villages, with a range of 19% (Nigeria) to 50% (Benin). Many such villages may have only an imported case, and thus may not really be endemic, but all have the potential to be endemic if proper control measures are not put into place as soon as the first worm emerges.

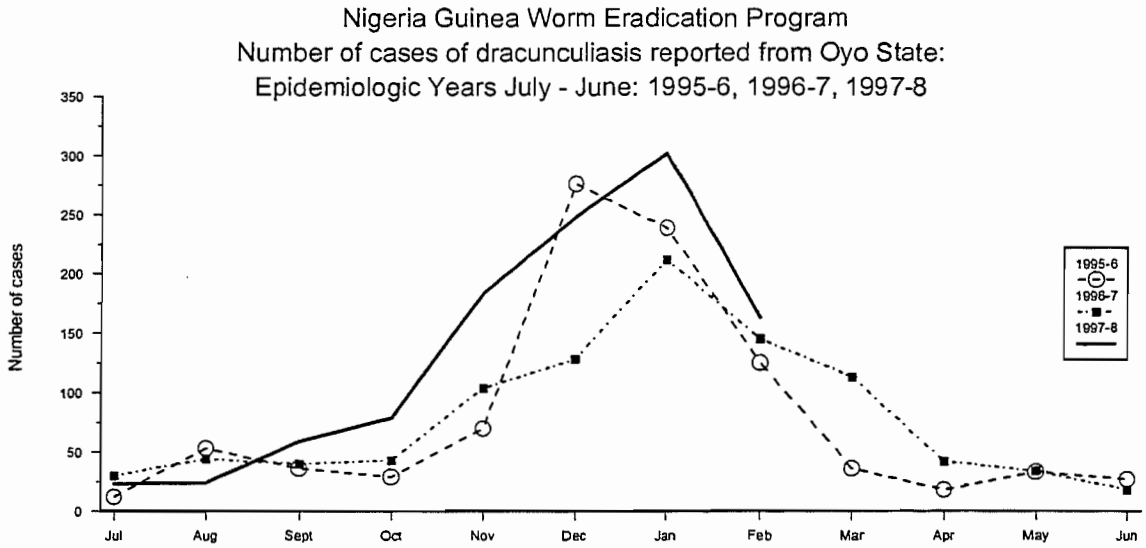
Uganda. Mr. Armstrong Opokwat, the Guinea Worm Coordinator for Gulu District, died in April. Mr. Opokwat had worked in the GWEP since 1992. Gulu District began the eradication program with 2,984 cases reported during the case search in 1991-92, and reported zero indigenous cases during 1997. Our thoughts and prayers are with his family.

RECENT PUBLICATIONS

WHO, 1998. Dracunculiasis: global surveillance summary, 1997. Wkly Epidemiol Rec, 73(18):129-135.

Figure 3


Nigeria Guinea Worm Eradication Program
Number of cases of dracunculiasis reported from Enugu & Ebonyi States:
Epidemiologic Years July - June: 1995-6, 1996-7, 1997-8
Number of cases
1,400
1,200
1,000
800
600
400
200
0
Jul
Aug
Sept
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
1995-6
1996-7
1997-8


Nigeria Guinea Worm Eradication Program
Number of cases of dracunculiasis reported from Oyo State:
Epidemiologic Years July - June: 1995-6, 1996-7, 1997-8
Number of cases
350
300
250
200
150
100
50
0
Jul
Aug
Sept
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
1995-6
1996-7
1997-8

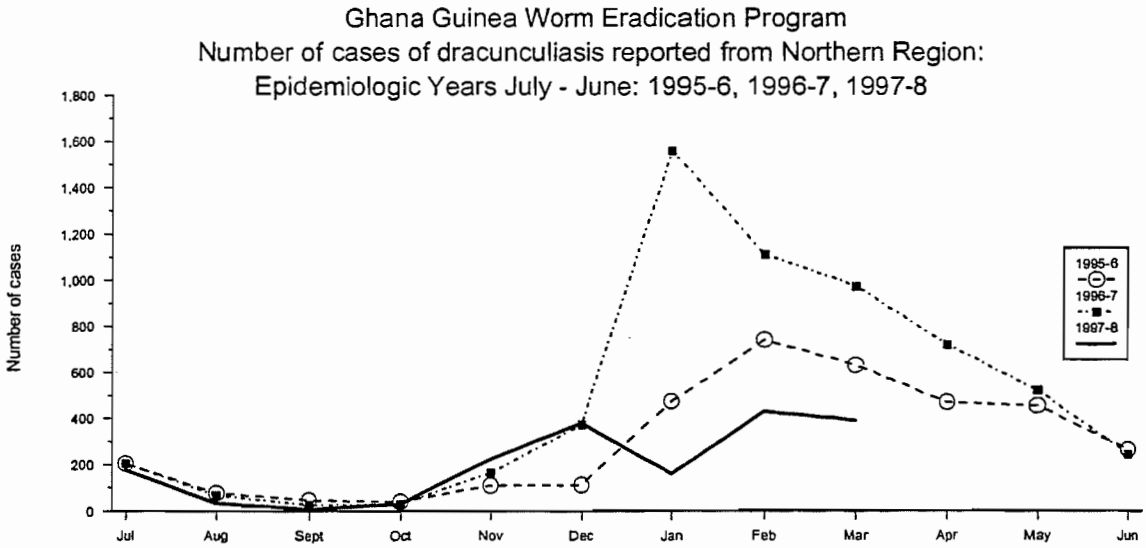

Ghana Guinea Worm Eradication Program
Number of cases of dracunculiasis reported from Northern Region:
Epidemiologic Years July - June: 1995-6, 1996-7, 1997-8
Number of cases
1,800
1,600
1,400
1,200
1,000
800
600
400
200
0
Jul
Aug
Sept
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
1995-6
1996-7
1997-8

Table 1

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

COUNTRY	# 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	43596	377 / 1185	456 / 625	319 / 481	/	/	/	/	/	/	/	/	/	1152 / 2291	50
NIGERIA	12590	1982 / 2020	1224 / 1305	1210 / 1278	/	/	/	/	/	/	/	/	/	4416 / 4603	96
GHANA	8921	670 / 1277	535 / 709	478 / 554	/	/	/	/	/	/	/	/	/	1683 / 2540	66
NIGER	3030	7 / 11	4 / 4	5 / 5	42 / 43	/	/	/	/	/	/	/	/	58 / 63	92
BURKINA FASO	2477	1 / 2	5 / 5	/	/	/	/	/	/	/	/	/	/	6 / 7	86
TOGO	1762	66 / 230	17 / 104	10 / 47	/	/	/	/	/	/	/	/	/	93 / 381	24
UGANDA	1374	7 / 8	3 / 6	24 / 43	/	/	/	/	/	/	/	/	/	34 / 57	60
COTE D'IVOIRE	1254	151 / 251	110 / 138	115 / 184	/	/	/	/	/	/	/	/	/	376 / 573	66
MALI	1099	9 / 10	2 / 5	0 / 0	/	/	/	/	/	/	/	/	/	11 / 15	73
BENIN	855	88 / 99	22 / 36	/	/	/	/	/	/	/	/	/	/	110 / 135	81
ETHIOPIA	451	1 / 1	6 / 6	10 / 10	59 / 61	/	/	/	/	/	/	/	/	76 / 78	97
MAURITANIA	388	0 / 0	0 / 0	0 / 0	/	/	/	/	/	/	/	/	/	0 / 0	–
CHAD	25	0 / 0	2 / 2	/	/	/	/	/	/	/	/	/	/	2 / 2	100
YEMEN	7	0 / 0	0 / 0	0 / 0	/	/	/	/	/	/	/	/	/	0 / 0	–
SENEGAL	4	0 / 0	0 / 0	/	/	/	/	/	/	/	/	/	/	0 / 0	–
CAMEROON	19**	0 / 0	0 / 0	/	/	/	/	/	/	/	/	/	/	0 / 0	–
INDIA	0	/	/	/	/	/	/	/	/	/	/	/	/	0 / 0	–
TOTAL*	77852	3359 / 5094	2386 / 2945	2171 / 2602	101 / 104	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	8017 / 10745	75
% CONTAINED		66	81	83	97									75	

* Provisional
** Reported 18 cases imported from Nigeria.

Figure 4

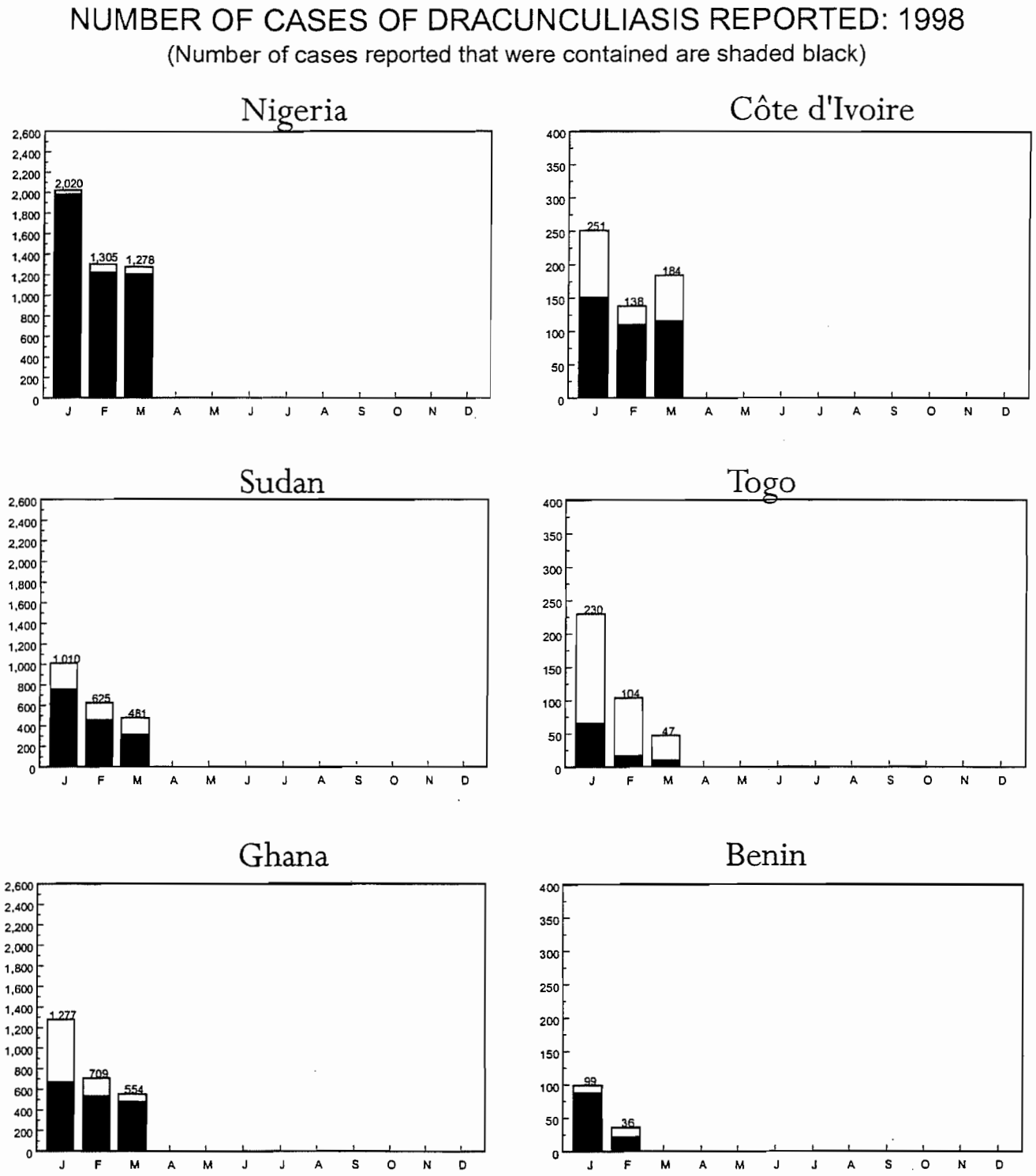

NUMBER OF CASES OF DRACUNCULIASIS REPORTED: 1998
(Number of cases reported that were contained are shaded black)
Nigeria
2,020
1,305
1,278
Côte d'Ivoire
251
138
184
Sudan
1,010
625
481
Togo
230
104
47
Ghana
1,277
709
554
Benin
99
36
J F M A M J J A S O N D

Figure 4 (con't)

NUMBER OF CASES OF DRACUNCULIASIS REPORTED: 1998

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

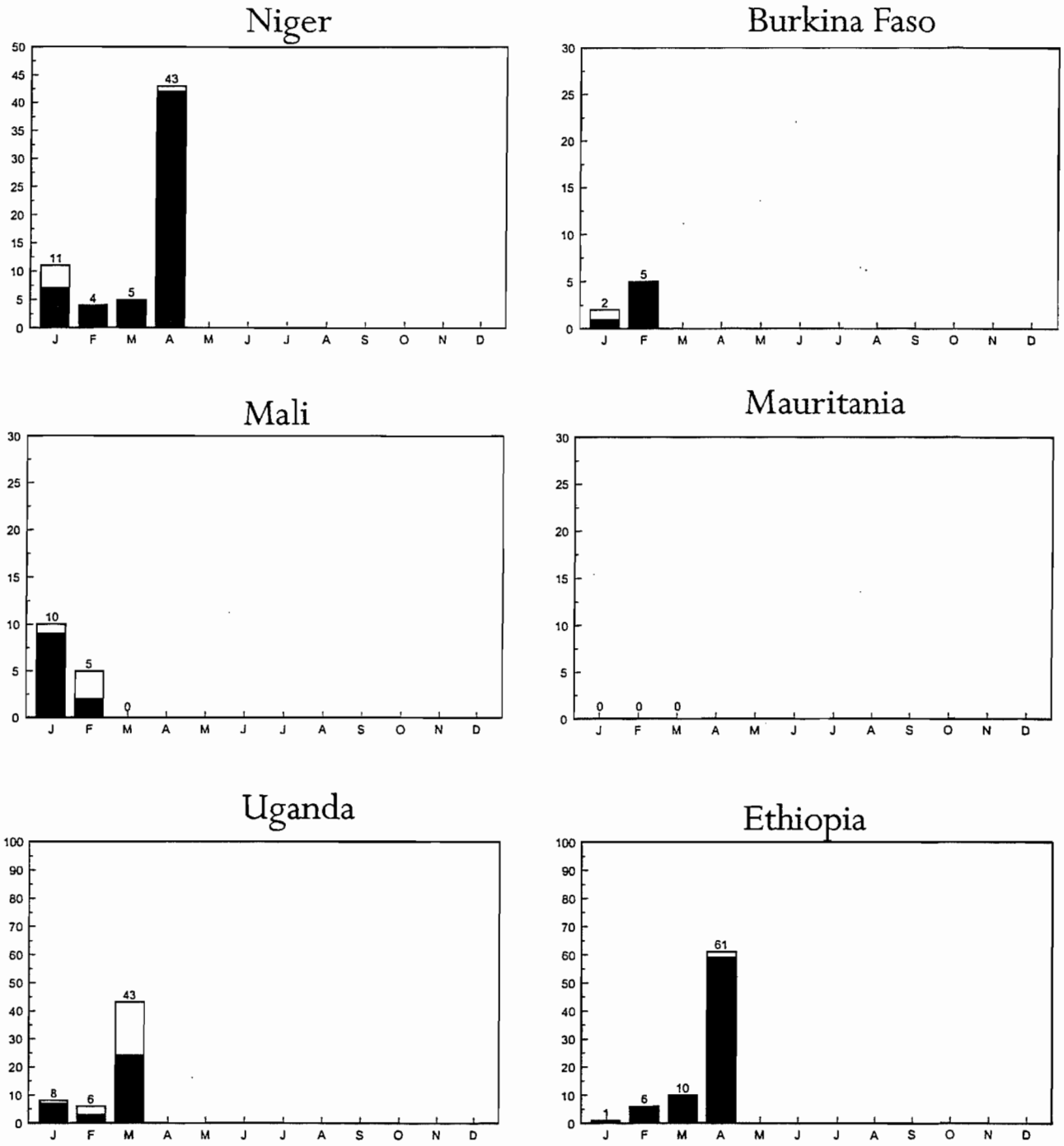


Table 2

Number of endemic villages reporting 1+ cases, only one case, and 5 or less cases during 1997

Country	Number and Percent of Villages Reporting Cases in 1997		
	=>1 (100%)	= 1(%)	=< 5 (%)
Nigeria: SE Zone	574	92(16%)	334(58%)
SW Zone	212	81(38%)	160(75%)
NW Zone	184	18(10%)	71(39%)
NE Zone	184	28(15%)	80(43%)
All Zones	1,154	219(19%)	645(59%)
Ghana	765	247(32%)	505(66%)
Niger	396	119 (30%)	NA
Burkina Faso	211	NA	NA
Togo	249	52 (21%)	120 (48%)
Uganda	243	90 (37%)	181 (74%)
Côte d'Ivoire	115	NA	NA
Mali	269	97 (36%)	193 (72%)
Benin	212	107 (50%)	NA
Ethiopia	57	12 (21%)	29 (51%)
Mauritania	83	NA	NA
Chad	10	4 (40%)	NA
Total	3,764	1,166 (31%)	2,318 (62%)

NA = data not available

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.

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