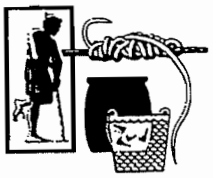
DEPARTMENT OF HEALTH & HUMAN SERVICES

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

Memorandum

Date December 12, 1997

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

Subject GUINEA WORM WRAP-UP #74

To Addressees

Detect Every Case, Contain Every Worm!

Editorial: GUINEA WORM ERADICATION AND NATIONAL IMMUNIZATION DAYS

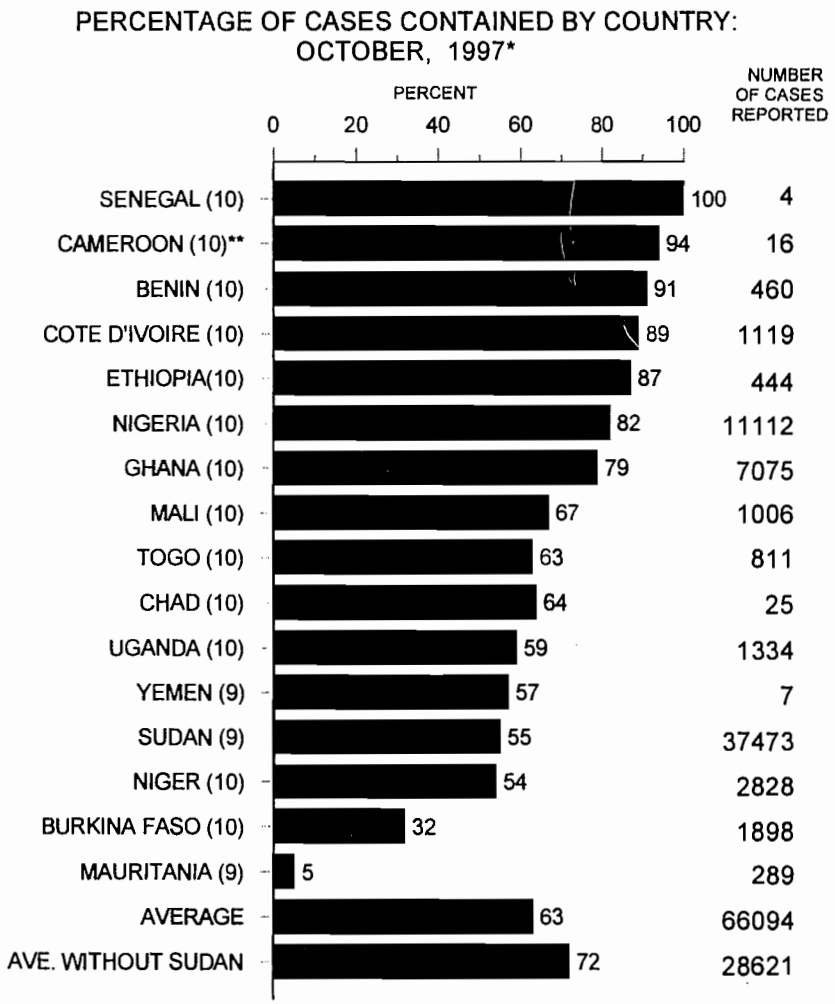
As polio eradication activities gather momentum in Africa, National Guinea Worm Eradication Programs (GWEPs) need to consider how the two eradication programs can help reinforce each other's efforts. Each program has something significant to offer the other, and both have much to lose from ill-considered "competition" in mutually endemic countries. The best contribution that GWEPs could make to the drive to "Kick Polio Out of Africa" by the year 2000 is to finish eradicating dracunculiasis and get out of the way as soon as possible. Until dracunculiasis is eradicated, however, leaders of the programs in each country should plan together how to maximize the complementarity and avoid any preventable conflict of their respective activities. Some preliminary ideas are presented here in an attempt to encourage that process.

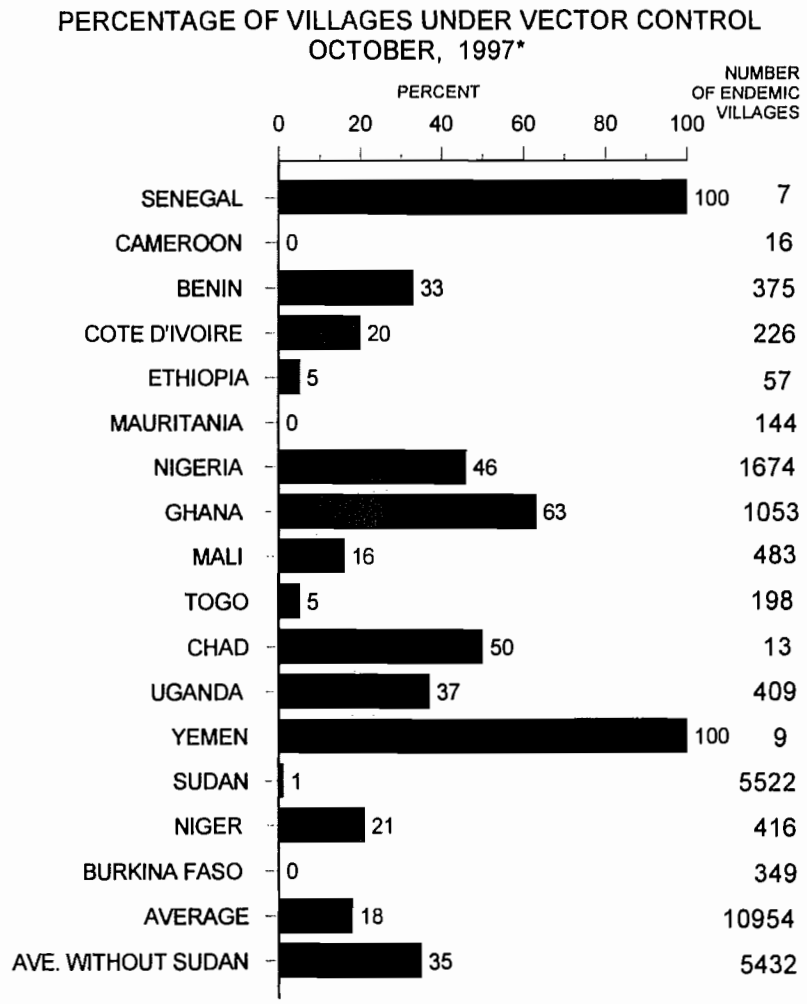
The intensive mobilization of National Immunization Days (NIDs), in which polio programs seek to immunize all children less than 5 years of age in a country within one to three days and then again about four weeks later, will be an annual feature of public health in all polio-endemic countries until polio is eradicated. NIDs are a key component of the polio eradication strategy, and they require the mobilization of all available resources, including help from GWEPs, for short periods. While the main purpose of such NIDs is to administer immunizations, with joint planning they may also represent opportunities to help GWEPs obtain information about the presence or suspected presence of dracunculiasis in selected areas of the country (the GWEP could provide "recognition cards" with a photograph of an emerging Guinea worm to increase the accuracy of such inquiries), and possibly to disseminate health education materials or information about rewards for reporting of a case of dracunculiasis. For their part, GWEPs can offer leaders of national Polio Eradication Programs logistical and other assistance in outreach to dracunculiasis-endemic communities (usually among the most remote parts of the country) during NIDs. In addition, experienced village-based health workers in each GWEP can potentially be used to help maintain surveillance for polio and new susceptibles (births) as dracunculiasis disappears from their communities. Both programs should also plan to take mutual advantage of any cease-fires brokered on behalf of either one, as in the dramatic example of the "Guinea Worm Cease-Fire" in Sudan in 1995.

NIDs have been conducted in November/December 1997 in Ethiopia, Ghana, and Mali at least. In Sudan, the GWEP is participating in planning for NIDs in both sides of the civil war; those NIDs are scheduled for February 15-21 and March 15-21, 1998.

Figure 1

GUINEA WORM ERADICATION PROGRAMS





* Provisional
(9) Reports for Jan.- Sept., 1997

** Reported 16 cases imported from Nigeria
(10) Reports for Jan.- Oct., 1997

UNITED KINGDOM PROVIDES MORE SUPPORT

On December 4, the United Kingdom announced additional support for the global campaign to eradicate dracunculiasis. The announcement was made in Liverpool, England, during the third annual meeting of the Joint Action Forum of the African Program for Onchocerciasis Control (APOC). Dr. David Nabarro of the UK's Department for International Development (DFID; the successor to the Overseas Development Agency, ODA), made the presentation to former U.S. President Jimmy Carter, on behalf of the Secretary of State for International Development, The Rt. Honorable Clare Short. The contribution of 500,000 pounds sterling (about US$ 833,000) was made to the Global 2000 Program of The Carter Center for use in the final stages of the Guinea Worm Eradication Program. The UK's developmental agency has made previous grants for dracunculiasis eradication to WHO and Ghana.

IN BRIEF:

Ghana's Guinea Worm Eradication Program reports that the Canadian International Development Agency (CIDA) project to help provide safe drinking water for the highly endemic district capitol of Gushiegu in the Northern Region has already begun its work, having advanced its timetable from December 1998 to December 1997. The unsafe water supply in the district capitol of Savelugu is now the most serious challenge remaining in the Northern Region program, which has already begun to treat the contaminated dams in both towns with Abate during the current peak transmission season.

Mali's Guinea Worm Eradication Program and the Corps des Volontaires Maliens (MVC) have agreed in principle to intensify their collaboration, in which 17 of the Malian volunteers are already working with the Guinea worm program in Gao and Timbuktu Regions, supported by a grant from USAID. The Guinea worm program also recently provided basic orientation and training about dracunculiasis eradication for 200 other volunteers in the national service. The MVC is funded by the United Nations Development Program (UNDP). Mali reported four imported cases in October: one from Burkina Faso (Markoye) to Gao, one from Niger (Tillabery) to Gao, and two from Mauritania (Massarame, Niconna) to Kayes. All four cases were cross-notified to WHO.

In Benin, the Guinea Worm Eradication Program conducted training and re-training in the use of Abate, with the assistance of Mr. M. Salissou Kane of Global 2000/Niger in November. Global 2000 consultant Mr. Harry Godfrey also worked with the GWEP in Benin and Togo following the Program Review in Bouake. The program in Togo is working to extend the use of Abate to more endemic villages during the current peak transmission season (Figure 1).

Côte d'Ivoire's National Program Coordinator, Dr. Henri Boualou, invited the WHO Collaborating Center for Research, Training, and Eradication of Dracunculiasis at CDC to assist in preparing that country's Plan of Action for 1998. Mr. Mark LaPointe departed for Côte d'Ivoire on December 4.

Mauritania has reported to WHO that through September 1997, a total of 289 cases of dracunculiasis had been detected (Table 1). Information regarding the distribution of cases by month, cases contained, and endemic villages reporting is forthcoming.

Table 1

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

COUNTRY	# 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	118578	1965 / 3590	862 / 1340	5603 / 8850	2621 / 7046	3184 / 7112	1967 / 2708	2050 / 2646	1609 / 2885	779 / 1296	/	/	/	20640 / 37473	55
NIGERIA	12282	1056 / 1211	1406 / 1425	976 / 1117	806 / 918	952 / 1113	1089 / 1478	1150 / 1649	933 / 1199	379 / 616	325 / 386	/	/	9072 / 11112	82
GHANA	4877	1498 / 1685	1182 / 1625	904 / 1226	680 / 909	583 / 652	272 / 376	194 / 274	73 / 97	53 / 69	123 / 162	/	/	5562 / 7075	79
BURKINA FASO	3241	17 / 19	8 / 35	3 / 45	15 / 48	54 / 336	139 / 346	192 / 438	54 / 464	125 / 162	5 / 5	/	/	612 / 1898	32
NIGER	2956	3 / 7	0 / 0	2 / 4	5 / 14	33 / 59	218 / 435	312 / 731	500 / 857	315 / 485	127 / 236	/	/	1515 / 2828	54
COTE D'IVOIRE	2794	147 / 160	178 / 197	114 / 129	157 / 200	134 / 149	88 / 89	96 / 97	56 / 56	14 / 14	14 / 28	/	/	998 / 1119	89
MALI	2402	27 / 44	11 / 11	4 / 4	10 / 21	24 / 31	78 / 107	134 / 182	199 / 315	134 / 190	53 / 101	/	/	674 / 1006	67
TOGO	1626	31 / 121	22 / 33	45 / 57	42 / 68	54 / 113	48 / 63	83 / 140	76 / 76	129 / 140	99 / 193	/	/	629 / 1004	63
UGANDA	1455	6 / 7	1 / 6	27 / 36	110 / 197	295 / 596	160 / 241	84 / 124	35 / 44	57 / 61	17 / 22	/	/	792 / 1334	59
BENIN	1427	98 / 112	38 / 41	15 / 19	74 / 79	28 / 30	17 / 18	4 / 10	18 / 21	38 / 39	88 / 91	/	/	418 / 460	91
MAURITANIA	562	2 / 2	1 / 1	1 / 1	7 / 10	4 / 4	/	/	/	/ 271	/	/	/	15 / 289	5
ETHIOPIA	371	4 / 5	3 / 5	8 / 8	40 / 43	78 / 108	110 / 128	62 / 65	56 / 57	20 / 20	5 / 5	/	/	386 / 444	87
CHAD	127	2 / 2	2 / 2	6 / 6	1 / 1	1 / 1	2 / 2	0 / 3	2 / 8	0 / 0	0 / 0	/	/	16 / 25	64
YEMEN	62	0 / 0	0 / 0	0 / 0	1 / 1	2 / 4	1 / 1	0 / 0	0 / 0	0 / 1	/	/	/	4 / 7	57
SENEGAL	19	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	3 / 3	1 / 1	0 / 0	0 / 0	0 / 0	/	/	4 / 4	100
CAMEROON**	17	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 1	7 / 7	3 / 3	5 / 5	0 / 0	/	/	15 / 16	94
INDIA	9	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	/	/	/	/	0 / 0	-
TOTAL*	152805	4856 / 6965	3714 / 4721	7708 / 11502	4569 / 9555	5426 / 10308	4192 / 5996	4369 / 6367	3614 / 6082	2048 / 3369	856 / 1229	0 / 0	0 / 0	41352 / 66094	63
% CONTAINED		70	79	67	48	53	70	69	59	61	70	-	-	63	

* Provisional
** Reported 16 cases imported from Nigeria.

NIGERIA: RECENT REDUCTIONS IN ENUGU AND EBONYI STATES

The incidence of dracunculiasis in endemic villages of Enugu and Ebonyi States in the South East Zone of Nigeria's Guinea Worm Eradication Program during epidemiologic years 1995-96, 1996-97, and 1997-98 is shown in Figure 3. Overall, incidence of reported cases decreased by 7%, from 3,337 cases in 1995-96 to 3,101 cases in 1996-97, but since June 1997 incidence has decreased by 63%, 77%, 23%, 44%, and 70% during June, July, August, September, and October, respectively. During 1996, training and supervision of personnel and all program interventions were intensified in an effort to further reduce disease incidence. It appears that those efforts may now be achieving the intended results, but their full effect will only become evident during the transmission season which is just now beginning. Recently, Global 2000 provided an additional US$ 7,000 in supplementary funding to support interventions in the South East Zone.

MEETINGS AND CONFERENCES

• 34th INTERAGENCY MEETING

The Interagency Coordinating Group for Dracunculiasis Eradication held its 34th meeting on December 2 at The Carter Center in Atlanta. The meeting reviewed results of the recently-concluded annual Program Reviews, discussed potential solutions to key problems in various countries, and discussed plans for next year's African Regional Conference (see below). Representatives from WHO, UNICEF, and Peace Corps participated in the meeting, in addition to persons from The Carter Center (Global 2000) and CDC.

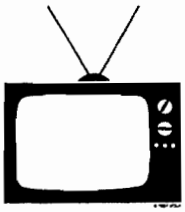
• 7th AFRICAN REGIONAL CONFERENCE

WHO's Regional Office for Africa has announced that the Seventh African Regional Conference on Dracunculiasis Eradication will be held in Bamako, Mali, March 31-April 3, 1998. In addition to the host Government of Mali, this conference will be co-sponsored by The Carter Center (Global 2000), CDC, UNICEF, and WHO. Former Malian Head of State General Amadou Toumani Touré and Former U.S. President Jimmy Carter are among those planning to attend.

• 3rd MEETING OF INTERNATIONAL CERTIFICATION COMMISSION

The International Commission for the Certification of Dracunculiasis Eradication will hold its Third Meeting at WHO headquarters in Geneva, Switzerland, on February 19-20, 1998. According to Dr. Kazem Behbehani, director of the Control of Tropical Diseases Division at WHO, applications are pending from more than 50 countries for certification at this meeting.

TELEVISION PROGRAM

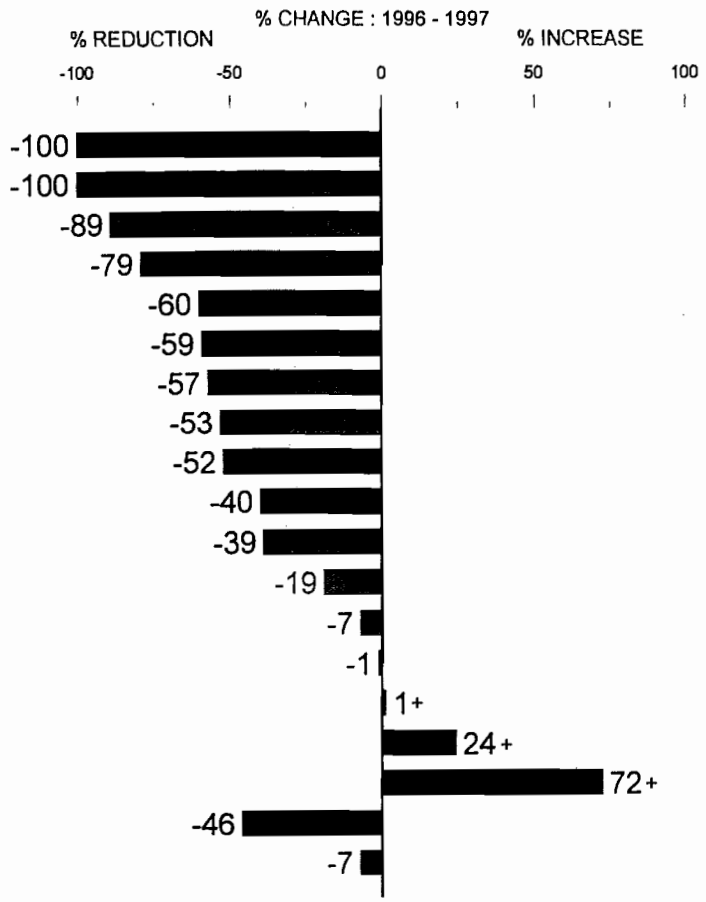


On January 11, 1998, the Public Broadcasting System (PBS) in the United States will televise the first two-hour component of a five-part series, "A Science Odyssey". This lead show will include a brief segment on dracunculiasis that was filmed in Ghana's Northern Region last January. The program will be aired nationally at 8:00 PM Eastern Standard Time. Some local PBS stations will run the series at another time, however, so check with your local PBS station to be sure when it will be broadcast in your area.

Figure 2

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

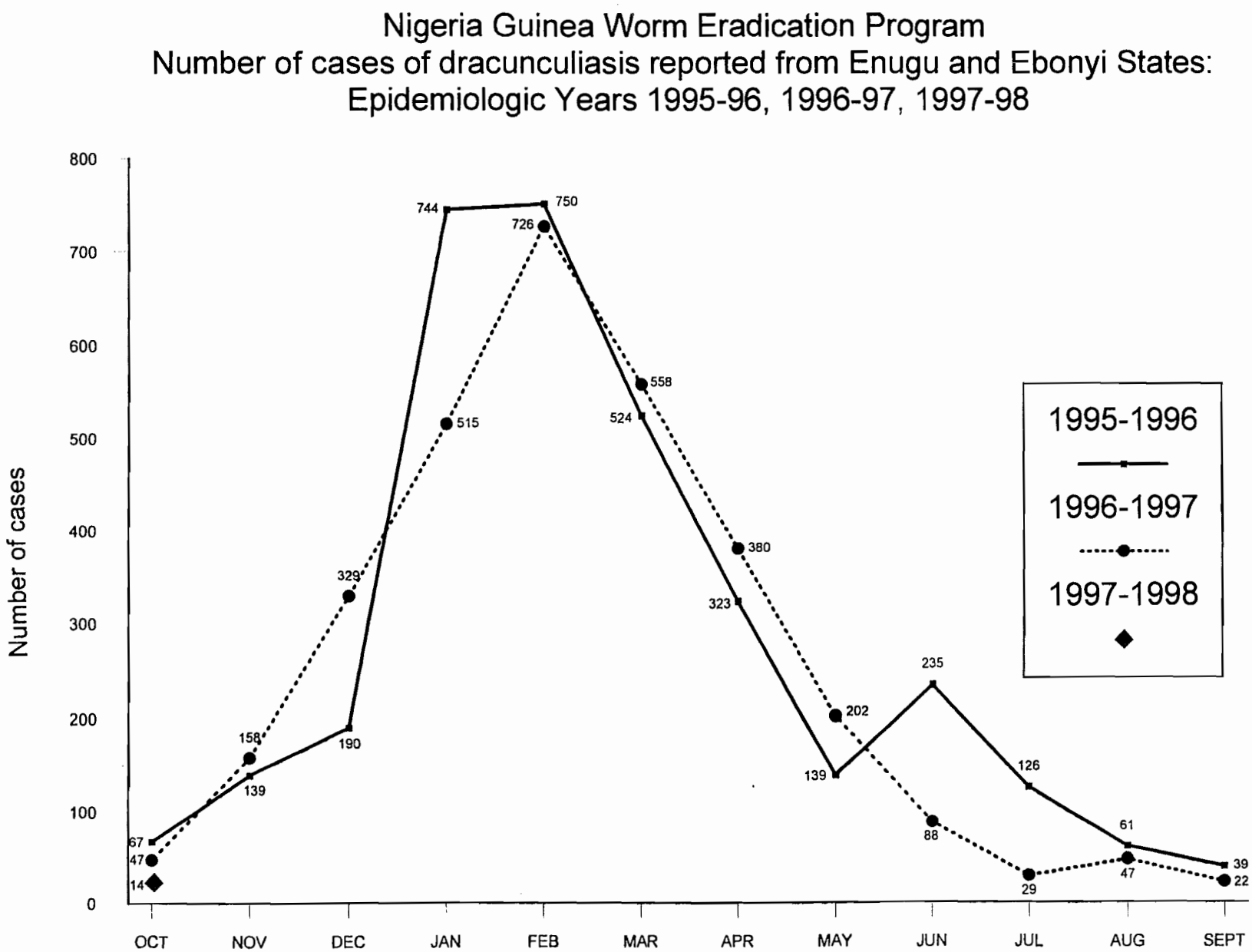
COUNTRY	ENDEMIC VILLAGES: 1997 NUMBER	ENDEMIC VILLAGES: 1997 % REPORTING	CASES REPORTED 1996	CASES REPORTED 1997	% CHANGE : 1996 - 1997
INDIA (8)	3	100	9	0	-100
CAMEROON (10)**	16	100	13	0	-100
YEMEN (9)	9	100	62	7	-89
CHAD (10)	13	100	118	25	-79
SENEGAL (10)	7	100	10	4	-60
SUDAN (9)	5522	35	91947	37473	-59
COTE D'IVOIRE (10)	226	92	2609	1119	-57
MALI (10)	483	84	2138	1006	-53
BENIN (10)	375	91	967	460	-52
BURKINA FASO (10)	349	24	3182	1898	-40
MAURITANIA (9)	144	NR	470	289	-39
TOGO (10)	198	83	1238	1004	-19
UGANDA (10)	409	99	1437	1334	-7
NIGERIA (10)	1674	96	11193	11112	-1
NIGER (10)	416	99	2789	2828	1+
ETHIOPIA (10)	57	97	359	444	24+
GHANA (10)	1053	100	4115	7075	72+
TOTAL***	10954	63	122652	66094	-46
TOTAL WITHOUT SUDAN ***	5432	92	30705	28621	-7



NR Not Reported
(8) Reports for Jan. - Aug. 1997
(9) Reports for Jan. - Sept. 1997
(10) Reports for Jan. - Oct. 1997

* Provisional
** Reported 16 cases imported from Nigeria in 1997.
*** Includes 16 cases imported into Cameroon

Figure 3


Nigeria Guinea Worm Eradication Program
Number of cases of dracunculiasis reported from Enugu and Ebonyi States:
Epidemiologic Years 1995-96, 1996-97, 1997-98
Number of cases
800
700
600
500
400
300
200
100
0
OCT
NOV
DEC
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEPT
1995-1996
1996-1997
1997-1998
67
139
190
744
750
323
139
235
126
61
39
47
158
329
515
726
558
524
380
202
88
29
47
22
14

RECENT PUBLICATIONS

Kumate J, 1997. Infectious diseases in the 21st century [Review]. Archives Med Res, Summer, 28(2): 155-161.

Peries H, Cairncross S, 1997. Global eradication of Guinea worm. Parasitology Today, 13:431-437.

Yelifari L, Frempong E, Olsen A, 1997. The intermediate hosts of *dracunculus medinensis* in Northern Region, Ghana. Ann Trop Med Parasitol, June, 91(4):403-409.

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.