




Memorandum

Date December 13, 1996

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

Subject GUINEA WORM WRAP-UP #62

To Addressees

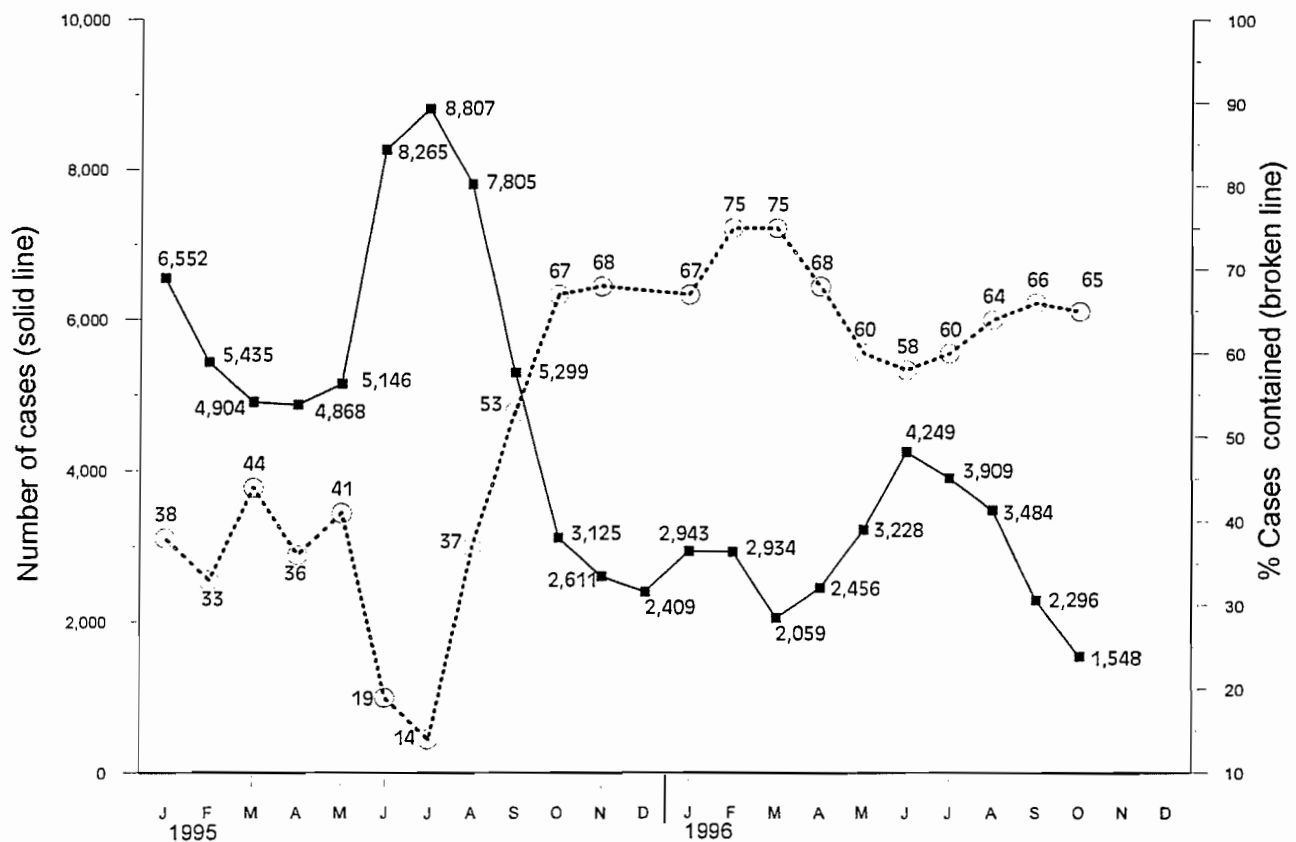
Detect Every Case, Contain Every Worm!

65% CONTAINMENT, 51% REDUCTION OF CASES OUTSIDE OF SUDAN IN 1996

For all endemic countries except Sudan, the rate of annual reduction in numbers of cases is 51% so far in 1996 (Figures 1 & 2), as compared to 42% in 1995 and 49% in 1994 (from 1993).

Figure 1

REPORTED CASES OF DRACUNCULIASIS AND OF CASES CONTAINED (%) FROM ALL ENDEMIC COUNTRIES EXCEPT SUDAN : JANUARY 1995 TO OCTOBER 1996

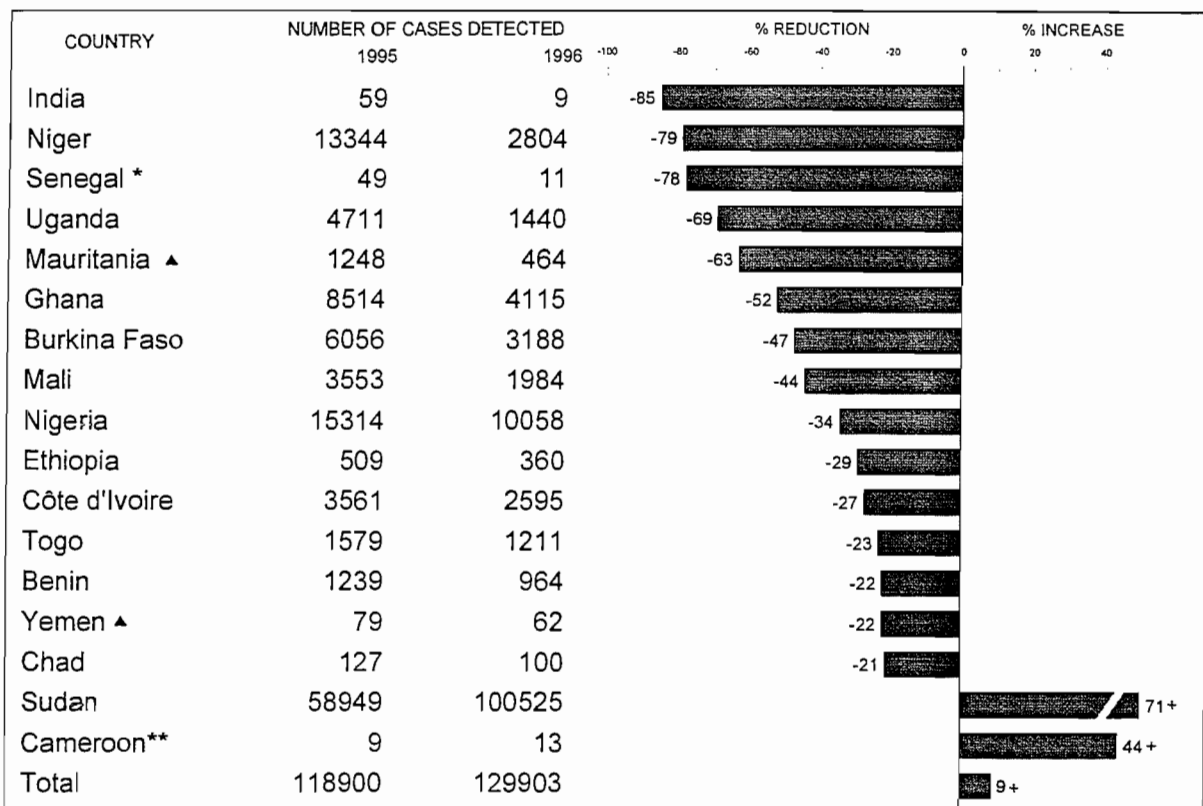


And as illustrated in [Figure 3](#) and [Table 1](#), approximately 65% of all cases of dracunculiasis reported outside of Sudan so far in 1996 were contained. This is an increase from containment of 56% of all non-Sudanese cases in 1995. (Whereas 9% of endemic villages were trained and supplied to conduct case containment at the end of 1993, and 55% at the end of 1994, over 85% were so trained and supplied at the end of 1995.) Rates of monthly reporting of cases have also risen steadily in all endemic countries outside Sudan, from 78% (1994) to 88% (1995), to 90% (1996). Use of Abate for vector control has been raised from 5% of all endemic villages (including Sudan) in 1993, to 10% in 1994, 17% as of October 1995, and 20% in 1996 ([Figure 4](#)).

These key indices document steady progress. They also point to the need for eradication programs in all remaining endemic countries outside of Sudan to give highest priority to increasing the proportion of cases contained to as near 100% as possible, and to increasing the proportion of endemic villages in which Abate is used in 1997. The specific endemic countries which most need to increase their containment of cases and use of Abate are shown in [Figures 3 & 4](#).

Figure 2

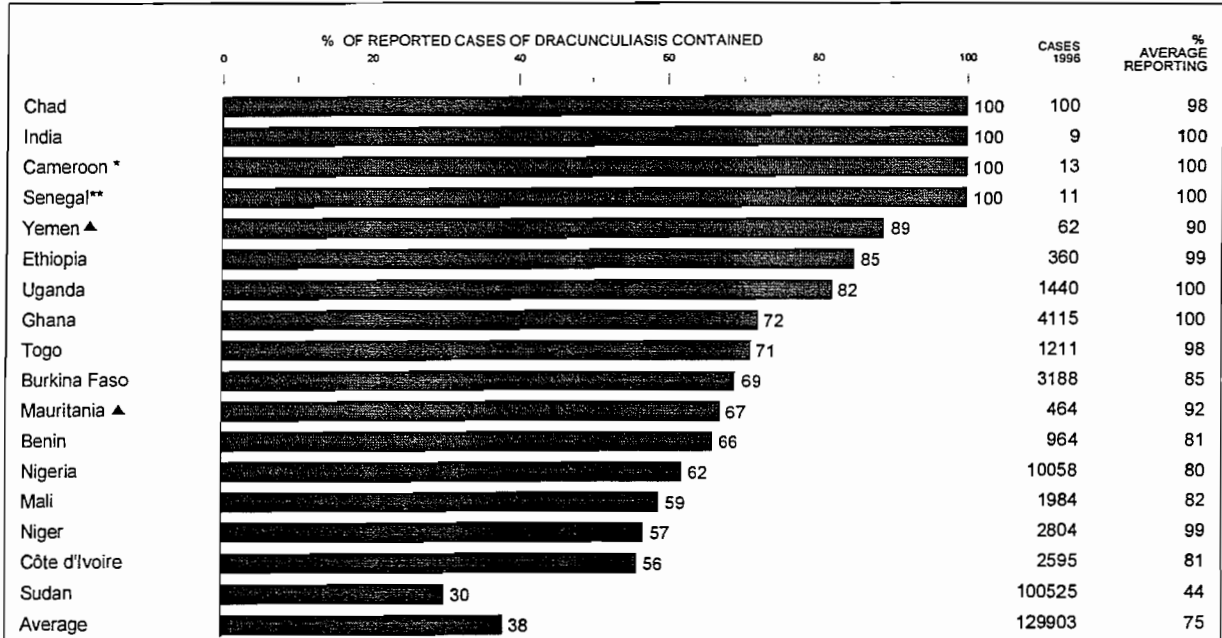
PERCENTAGE CHANGE IN NUMBER OF CASES OF DRACUNCULIASIS REPORTED DURING JANUARY - OCTOBER 1995 AND JANUARY - OCTOBER 1996, * BY COUNTRY



* Provisional
 * Reported 1 case imported from Mali in September
 ** Reported 10 cases imported from Nigeria: 1 case in May, 1 in June, 1 in August, 3 in September, and 4 in October.

Figure 3

PERCENTAGE BY COUNTRY OF CASES CONTAINED, REDUCTION IN CASES COMPARED TO SAME PERIOD IN 1995, AND ENDEMIC VILLAGES REPORTING: JANUARY - OCTOBER * 1996



* Provisional

▲ Jan. - Sept. data only

* Reported 10 cases imported from Nigeria: 1 case in May, 1 in June, 1 in Aug., 3 in Sept., and 4 in Oct..

** Reported 1 case imported from Mali in September

Figure 4

PERCENTAGE OF ENDEMIC VILLAGES (CASES IN 1996) UNDER VECTOR CONTROL AS OF OCTOBER 1996

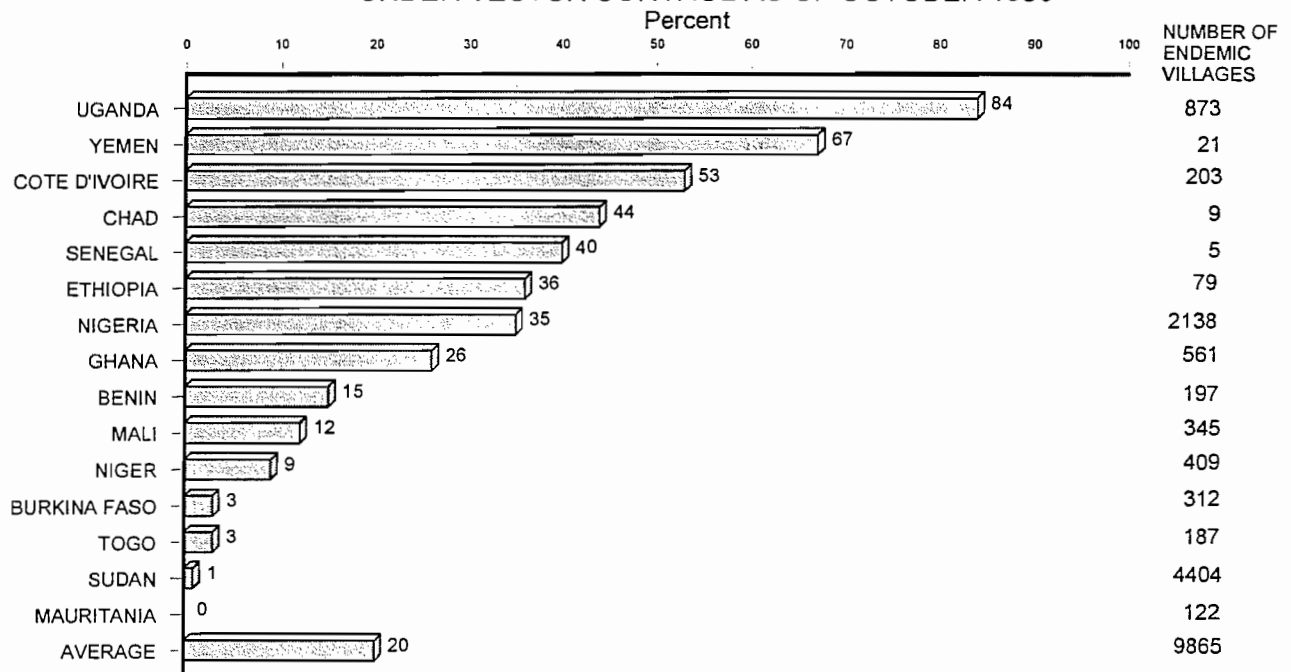


Table 1

**NUMBER OF CASES CONTAINED AND NUMBER REPORTED BY MONTH, 1996
(COUNTRIES ARRANGED IN DESCENDING ORDER OF CASES IN 1995)**

COUNTRY	NUMBER OF CASES IN 1995	NUMBER OF CASES CONTAINED / NUMBER OF CASES REPORTED												TOTAL*
		JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	
SUDAN	64608	314 / 1535	384 / 1003	1481 / 3632	1430 / 10388	4526 / 15718	3969 / 13087	4233 / 14553	5736 / 16602	5226 / 14764	3172 / 9243	/ 253	/	30471 / 100778
NIGERIA	16374	778 / 1264	926 / 1023	562 / 675	559 / 801	523 / 1153	803 / 1870	546 / 1419	769 / 1009	420 / 491	350 / 353	/	/	6236 / 10058
NIGER	13821	17 / 25	2 / 5	0 / 0	9 / 10	28 / 74	167 / 210	344 / 508	434 / 886	419 / 757	191 / 329	92 / 130	/	1703 / 2934
GHANA	8894	467 / 611	657 / 863	538 / 728	388 / 535	340 / 502	231 / 386	142 / 235	61 / 100	72 / 87	52 / 68	/	/	2948 / 4115
BURKINA FASO	6281	25 / 37	37 / 58	72 / 118	97 / 154	309 / 392	514 / 748	461 / 696	287 / 528	296 / 355	88 / 102	/	/	2186 / 3188
UGANDA	4810	39 / 46	22 / 24	28 / 40	232 / 276	329 / 444	-264 / 310	147 / 164	59 / 70	38 / 46	17 / 20	/ 10	/	1175 / 1450
MALI	4218	49 / 76	13 / 15	14 / 19	55 / 153	78 / 86	132 / 215	203 / 405	259 / 447	254 / 378	120 / 190	/	/	1177 / 1984
COTE D'IVOIRE	3801	244 / 368	272 / 606	188 / 299	171 / 343	164 / 358	137 / 249	111 / 160	117 / 125	30 / 46	32 / 41	/	/	1466 / 2595
TOGO	2073	200 / 225	168 / 194	79 / 117	62 / 74	61 / 61	78 / 78	64 / 64	61 / 61	88 / 98	/ 239	/	/	861 / 1211
BENIN	2273	133 / 256	56 / 94	14 / 23	43 / 53	48 / 81	15 / 22	48 / 55	37 / 53	108 / 132	139 / 195	/	/	641 / 964
MAURITANIA	1762	8 / 9	4 / 6	2 / 2	6 / 7	1 / 2	27 / 35	59 / 82	105 / 175	99 / 146	/	/	/	311 / 464
ETHIOPIA	514	0 / 1	1 / 4	2 / 2	17 / 29	58 / 64	88 / 110	97 / 106	25 / 25	15 / 15	4 / 4	7 / 7	/	314 / 367
CHAD	149	24 / 24	34 / 34	23 / 23	5 / 5	2 / 2	4 / 4	4 / 4	4 / 4	0 / 0	0 / 0	0 / 0	/	100 / 100
YEMEN	82	0 / 1	7 / 8	12 / 12	14 / 14	5 / 5	6 / 10	4 / 5	2 / 2	5 / 5	/	/	/	55 / 62
SENEGAL***	76	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	1 / 1	1 / 1	2 / 2	4 / 4	3 / 3	0 / 9	/	11 / 20
INDIA	60	0 / 0	0 / 0	0 / 0	2 / 2	4 / 4	0 / 0	3 / 3	0 / 0	0 / 0	0 / 0	0 / 0	/	9 / 9
KENYA	23	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	/	/	/	/	0 / 0
CAMEROON**	15	0 / 0	0 / 0	0 / 0	0 / 0	1 / 1	0 / 0	1 / 1	2 / 2	5 / 5	4 / 4	0 / 0	/	13 / 13
PAKISTAN	0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	/	/	0 / 0
TOTAL*	129834	2298 / 4478	2583 / 3937	3015 / 5690	3090 / 12844	6477 / 18947	6436 / 17335	6468 / 18461	7960 / 20091	7079 / 17329	4172 / 10791	99 / 409	0 / 0	49677 / 130312

* Provisional
 ** Reported 10 cases imported from Nigeria 1 case in May, 1 in July, 1 in August, 3 in September, and 4 in October.
 *** Reported 1 case imported from Mali in September.

SUDAN: OVER 100,000 CASES; REDUCTIONS IN NORTH; PREPARING FOR 1997

In January-October 1996, Sudan has reported a total of 100,525 cases of dracunculiasis. This is already an increase of 56% over the 64,608 cases reported in Sudan in all of 1995. The 11 northern states, however, reduced their number of cases by 27%, from 2,359 cases in January-October 1995 to 1,720 cases during the same period in 1996. There are now 5,590 known endemic villages in Sudan. 30% of the cases reported so far in 1996 were contained or managed. At a Quarterly Meeting of Guinea Worm Eradication Program Coordinators from the Operation Lifeline Sudan (OLS) Southern Sector in Lokichokio on November 27-28, including representatives of the Sudan Relief and Rehabilitation Association (SRRA) and other NGOs, training of health workers was identified as one of the program's highest priorities in the Southern Sector for the next three months. This will include training in case containment and use of Abate. Distributing as many supplies as possible to endemic villages before the rains begin again in April is another high priority. Participants also discussed continued efforts to coordinate and expand provision of safe water supplies in endemic areas in cooperation with water supply personnel. The Federal Ministry of Health will convene the next Review Meeting for its state and zonal coordinators on the Government of Sudan (GOS) side in Khartoum later this month. For the first time, the GOS is including funding for dracunculiasis eradication as a line item in its national budget. UNICEF/Sudan recently donated \$80,000 in cash and materiel to the program, including a boat to help improve access to endemic areas in Upper Nile.

GHANA: 7 OF 10 REGIONS DRACUNCULIASIS-FREE IN OCTOBER; BRITISH ODA PROVIDES ASSISTANCE

For the first time since monthly reporting began, seven of Ghana's 10 regions reported no indigenous cases in October (Table 2). Compared to 1995, the program has also reduced its endemic villages by 42%, the largest annual reduction ever achieved in Ghana's endemic villages. The regions have all recently made plans to introduce or expand an offer of token cash incentives to motivate patients with Guinea worm to volunteer early for management and containment measures. The amount of incentives vary, with persons who have pre-emergent worms, and the health workers who report them, receiving more than those whose worms have already begun to emerge when they are reported. The maximum that anyone will receive is the equivalent of about US\$1.00. In the hyper-endemic eastern part of Northern Region, badly-needed repairs to drinking water sources in the district capitals of Yendi, Chereponi, and Gushiegu have been completed or are underway. Similar repairs are still needed in Bimbilla, Salaga, and Savelugu.

In November, the United Kingdom Overseas Development Administration (ODA) provided \$50,000 for Ghana's Guinea Worm Eradication Program, via WHO. This is the first installment of \$113,000 pledged by the ODA for the program in 1996. The first installment of funds was used to support field operations, including purchase of bicycles and replacement bicycle parts. Up to now, most external assistance to Ghana for eradication of dracunculiasis has been provided by USAID, Global 2000, UNICEF, and the Danish Bilharziasis Laboratory, in addition to support provided by Ghana's Ministry of Health. Two Ghanaian pharmaceutical supply companies, Rock Chemists and UNICHEM (Ghana) Ltd, have donated medical supplies for kits provided to all the regions for bandaging wounds caused by Guinea worms.

Table 2 NUMBER OF CASES REPORTED BY REGION: 1996

REGION	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	TOTAL
Western ³	11	9											24
Central	42	31	23	21	8	12	7	10	13	13			180
Eastern ⁵	4	24	5	4	11	9	2	6	17				84
Greater Accra ¹			5										17
Volta	51	34	34	34	11	46	17	14	27	24			292
Ashanti	4		6			17							27
Brong Ahafo	17	20	16	5		5			3				66
Northern	475	741	632	470	456	265	204	66	26	29			3364
Upper West ⁴	4				10	24							39
Upper East ²													22
TOTAL	611	863	728	535	502	386	235	100	87	68	0	0	4,115

¹ Greater Accra reported 3 imported cases in January, 2 in February, 4 in May, 1 in June, and 2 in August.

² Upper East reported 2 imported cases in February, 7 in March, 2 in May, 7 in June, 2 in July, and 2 in August.

³ Western reported 3 imported cases July, and 1 in September.

⁴ Upper West reported 1 imported cases in April.

⁵ Eastern reported 2 imported cases in October

Denotes zero indigenous cases reported.

TEN YEARS OF GLOBAL 2000 VS. DRACUNCULIASIS

November 21 marked the tenth anniversary of the entry of Global 2000/The Carter Center into the battle to eradicate dracunculiasis. The occasion was an all-day meeting held at The Carter Center to begin planning assistance by Global 2000 and CDC to help initiate the national Guinea Worm Eradication Program in Pakistan. The meeting, which followed a visit by President Jimmy Carter to Pakistan earlier that month, was attended by the head of Pakistan's National Institute of Health, General M. I. Burney, President Carter, and several scientists from The Carter Center and CDC. As was observed then, that meeting was the beginning of Pakistan's GWEP, and it was believed to have completed the front against dracunculiasis in Asia (India's program was already underway; recent cases were only discovered in Yemen in 1994). Global 2000's first resident advisor arrived in Pakistan in February 1987.

IN BRIEF:

Côte d'Ivoire. The national program coordinator, Dr. Henri Boualou, reports that in anticipation of the peak transmission period starting in December/January, on December 3rd the program began an intensive two-week excursion by three teams to all endemic regions, focusing especially on the 53 most highly endemic villages. Côte d'Ivoire collected its Abate from Ghana in early December.

Niger and Nigeria held their second border meeting in Kano, Nigeria, on November 26-27. The team from Niger was led by Mr. Salissou Kane, and included the regional Guinea worm coordinators from Zinder, Maradi, and Tahoua Departments. Nigeria was represented by the National Program Coordinator, Dr. K. A. Ojodu, the Northeast Zonal Coordinator, Mr. B. Nwobi, and others. The participants discussed cross-border reporting and health education. Mr. Kane was interviewed on British Broadcasting Corporation (BBC) radio in the Hausa language while in Nigeria, and his interview was heard by colleagues in Niamey. The progress of Niger's program this year is illustrated in Figure 5.

Uganda's GWEP has postponed its first external evaluation until the first two weeks of March 1997. For the first time, this program reports only 10 cases in November (Figure 6).

Figure 5

Niger Guinea Worm Eradication Program
Number of Cases Reported by Month: 1995 - 1996

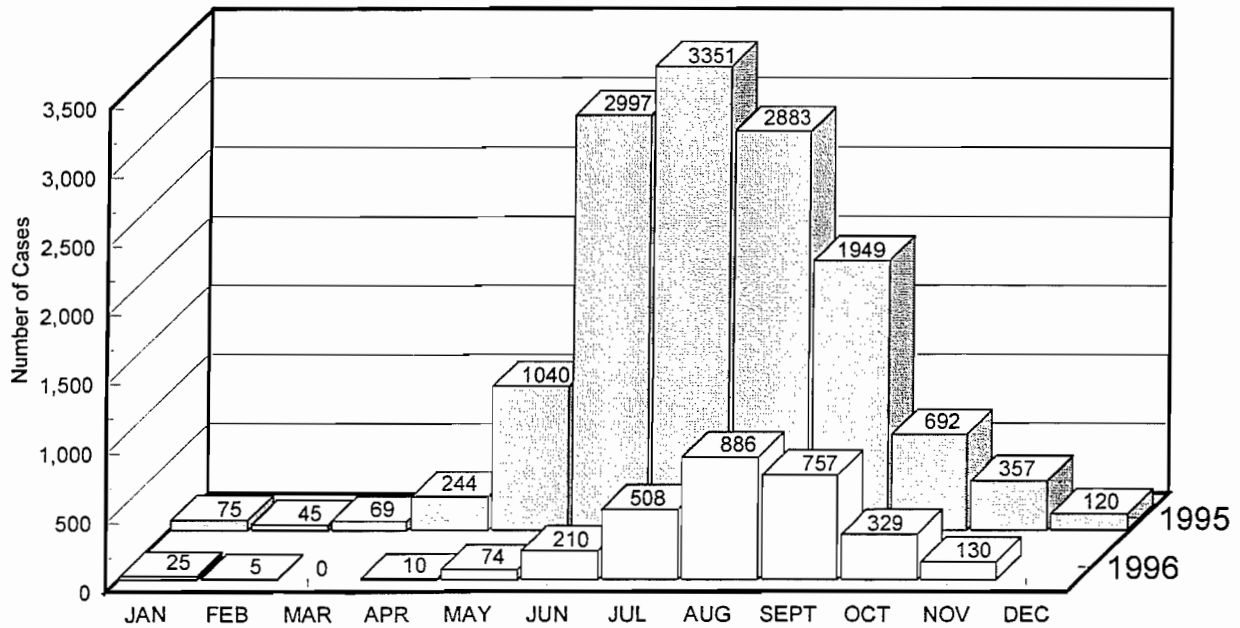
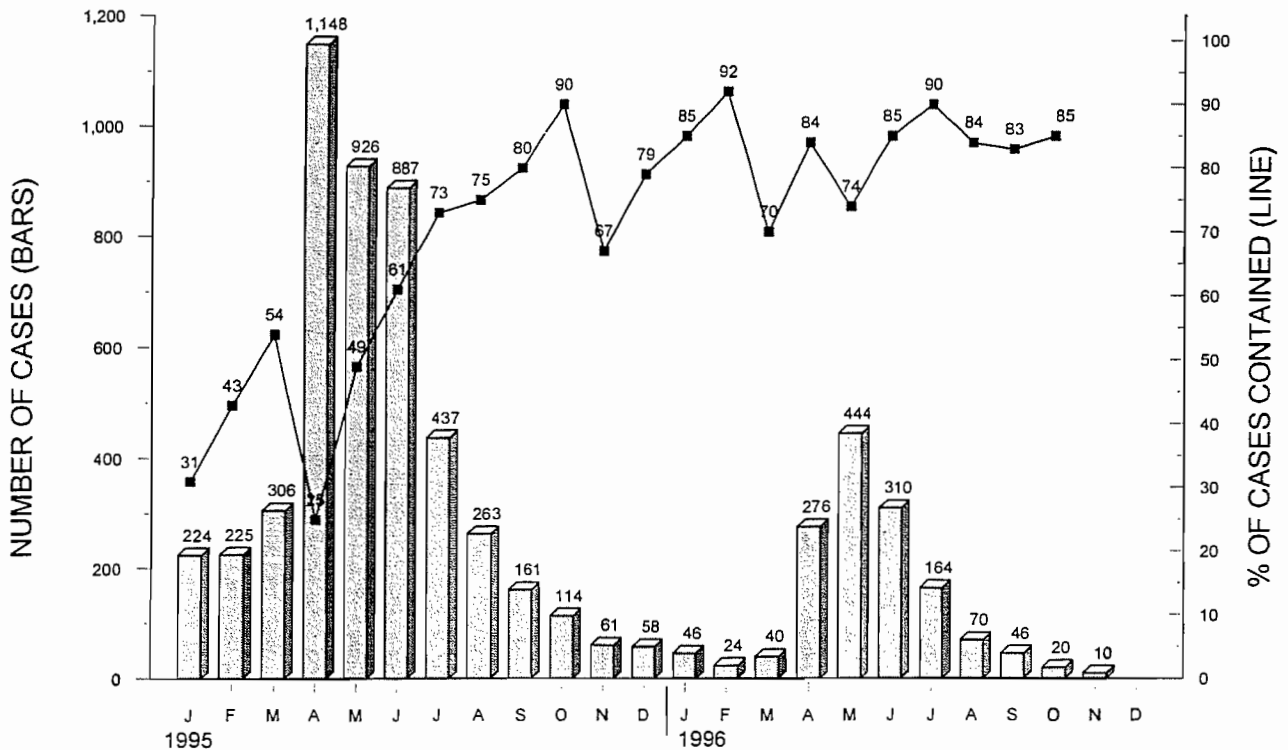


Figure 6

UGANDA GUINEA WORM ERADICATION PROGRAM
NUMBER OF CASES OF DRACUNCULIASIS REPORTED (BARS) AND
% OF CASES CONTAINED (LINE): 1995 - 1996



DUPONT AND PRECISION FABRICS GROUP DONATE MORE FILTER MATERIAL



The E. I. du Pont de Nemours & Company and Precision Fabrics Group have agreed to donate another 300,000 square yards of mono-filament nylon material to The Carter Center for use in the Guinea Worm Eradication Programs in Africa, especially Sudan, in 1997 and 1998. Half of the new donated material, which has been the basis for the key intervention in this eradication program, will be delivered early in 1997; the other half early in 1998. The two companies had already donated more than 2 million square yards of the nylon cloth, the retail value of which exceeds US\$14 million (not including shipping, which was also donated by du Pont), making them the largest donor to the global dracunculiasis eradication campaign, except for water supply projects. This final donation is necessary because of the unexpected large numbers of cases in Sudan, and because of the delay in completing eradication in some other countries. Programs must focus use of this valuable resource on currently endemic villages. They should also use all other appropriate interventions in those villages, including Abate wherever possible and case containment, in 1997.



RECENT PUBLICATIONS



Ameh IG, Onwuliri COE, 1995. Knowledge, attitudes, practices, beliefs (KAPB) and certain socio-cultural attributes of guineaworm disease among a rural community. Benue State, Nigeria. Nigerian J Parasitol, 16:27-32.

Ameh IG, Onwuliri COE, Akoh JI, 1995. Dracunculiasis and agriculture in some rural communities, Benue State, Nigeria. Nigerian J Parasitol, 16:21-25.

Hopkins DR, 1996. Eradication of polio and guinea worm disease. Cleveland Clinic J Med, 63:375-376.

WHO, 1996. Dracunculiasis - Programme review of French-speaking endemic countries. Wkly Epidemiol Rec, 71:345-346.

WHO, 1996. Criteria for the Certification of Dracunculiasis Eradication. Geneva: World Health Organization. WHO/FIL/96.187 Rev 1. 31pp.

*Inclusion of information in the Guinea Worm Wrap-Up does not constitute "publication" of that information.
The GW Wrap-Up is published in memory of BOB KAISER.*

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