

**Memorandum**

Date November 8, 1996

From

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

Subject GUINEA WORM WRAP-UP #61

To Addressees

**Detect Every Case. Contain Every Worm!****INTERNATIONAL TEAM VERIFIES NO DRACUNCULIASIS IN PAKISTAN !!!**

Dr. Mohammad Azam, the National Program Manager of Pakistan's Guinea Worm Eradication Program, reports that an International Certification Team (ICT), which visited Pakistan for four weeks beginning on September 8, has verified the absence of dracunculiasis from Pakistan for the past three years, since the last known case was reported in October 1993 (Figure 1). The three members of the ICT (Dr. Abolhassan Nadim, team leader, Dr. M.M. Hajar, and Dr. John M. Lassen) each led a group which visited one of the three formerly endemic provinces. The groups visited a total of 65 villages in three formerly endemic provinces, and interviewed 276 persons. Their conclusion was based on finding a high level of knowledge about dracunculiasis and its prevention among the persons interviewed, evidence of effective widespread health education about the disease, awareness of most persons about the reward for reporting a case of dracunculiasis, registration and follow up of rumors of cases during the past five years, "effective containment of all cases found in 1992 and 1993", and no evidence of the disease in previously infected areas over the past three years.

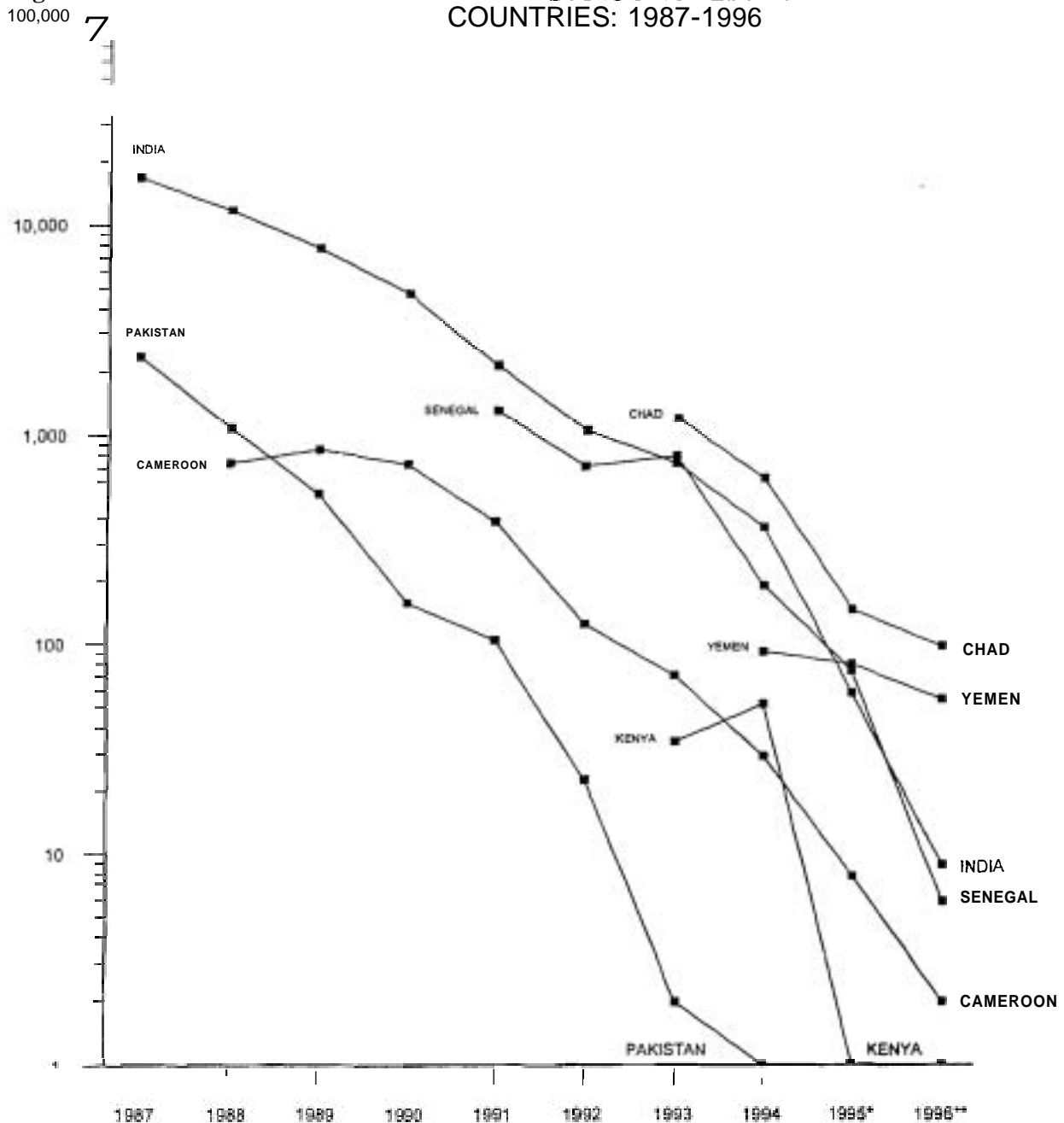
The report of the ICT will be submitted to the International Commission for the Certification of Dracunculiasis Eradication at its next meeting in Geneva in January 1997. Dr. Kazem Behbehani, Director, DCTD/WHO informed the Interagency Coordinating Group in Atlanta, on November 4, that the International Commission will also consider several other countries in January. The national Guinea Worm Eradication Program in Pakistan was the first program to be assisted by Global 2000 and CDC, which together provided \$1.9 million in external assistance, starting in November 1986. Direct assistance by Global 2000 ended in November 1991; however, CDC continued to support technical consultations through 1994. Additional external assistance for Pakistan's program was provided by the Eastern Mediterranean Regional Office of WHO (\$0.14 million) and UNICEF/Pakistan (\$0.067 million).

**EDITORIAL: 1995 IS STILL OUR TARGET**

*It is now clear that at least 30,000 cases of dracunculiasis will be reported outside of Sudan during 1996 (Table 1). Resolution WHA44.5 of the 1991 World Health Assembly declared the Assembly's commitment to the goal of<sup>cc</sup> . . . eradicating dracunculiasis by the end of 1995." The same target date was set by African ministers of health during their annual*

meeting under the auspices of WHO's Regional Office for Africa, Brazzaville, in September 1988. Now that the goal has been narrowly missed, with a reduction of over 97% (but not 100%) in incidence of dracunculiasis since 1986, the challenge is to complete the eradication of dracunculiasis as soon as possible. No other target *date has* been set for eradicating dracunculiasis, nor is another such target date needed, advisable or appropriate. What is needed is for all concerned to work to ensure that every case in 1996 and 1997 is detected promptly, and that programs contain every case in 1997, from January to December.

**Figure 1** DECLINE OF CASES OF DRACUNCULIASIS IN SELECTED COUNTRIES: 1987-1996



\*Kenya reported 23 imported cases and Cameroon reported 7 imported cases in 1995

\*\* Senegal reported 1 imported case and Cameroon reported 3 imported cases in 1996

Provisional reports: January - September 1996

Table 1

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

COUNTRY	# OF ENDEMIC VILLAGES: 1/1/96	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	1932	64608	432 / 1535	430 / 1003	1313 / 3623	1330 / 10379	4805 / 13612	4998 / 13087	3696 / 12628	3397 / 9395	1105 / 2548	/	/	/	22186 / 69810
NIIGERIA	1846	36374	778 / 1264	926 / 1023	562 / 675	539 / 801	523 / 1153	803 / 1870	546 / 1419	769 / 1009	420 / 491	/	/	/	3886 / 9705
NIGER	750	13821	17 / 25	2 / 5	0 / 0	9 / 10	28 / 34	167 / 230	344 / 508	434 / 886	419 / 757	/	/	/	1420 / 2475
GHANA	1057	8894	467 / 611	657 / 863	538 / 728	388 / 535	340 / 902	231 / 386	142 / 235	61 / 100	72 / 87	/	/	/	2896 / 4047
BURKINA FASO	516	6281	25 / 37	37 / 58	72 / 118	97 / 154	309 / 392	514 / 748	461 / 696	299 / 526	60 / 223	/	/	/	1834 / 2952
UGANDA	830	4830	39 / 46	22 / 24	28 / 40	232 / 276	329 / 444	264 / 309	147 / 164	59 / 70	38 / 46	/	/	/	1158 / 1420
MALI	534	4218	49 / 36	13 / 15	14 / 19	55 / 153	78 / 86	132 / 225	203 / 405	259 / 467	254 / 378	/	/	/	1057 / 1794
COTE D'IVOIRE	252	3801	244 / 368	272 / 606	188 / 209	171 / 343	164 / 358	137 / 249	111 / 160	117 / 125	30 / 46	/	/	/	1434 / 2554
TOGO	302	2073	200 / 225	168 / 194	79 / 117	62 / 74	61 / 61	78 / 78	64 / 64	61 / 61	88 / 98	/	/	/	861 / 972
BENIN	491	2273	133 / 256	56 / 94	14 / 23	43 / 55	48 / 81	15 / 22	48 / 55	39 / 52	/	/	/	/	399 / 636
MAURITANIA	255	1762	8 / 9	4 / 6	2 / 2	6 / 7	1 / 2	27 / 33	59 / 82	105 / 175	99 / 146	/	/	/	311 / 464
ETHIOPIA	77	514	0 / 1	1 / 4	2 / 3	17 / 29	58 / 64	88 / 110	97 / 106	23 / 25	15 / 15	/	/	/	303 / 356
CHAD	39	149	24 / 24	34 / 34	23 / 23	5 / 5	2 / 2	4 / 4	4 / 4	4 / 4	0 / 0	/	/	/	100 / 100
YEMEN	21	82	0 / 1	7 / 8	12 / 12	14 / 14	5 / 5	6 / 10	4 / 5	/	/	/	/	/	48 / 55
SENEGAL**	15	76	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	1 / 1	1 / 1	1 / 1	4 / 4	/	/	/	7 / 7
INDIA	24	60	0 / 0	0 / 0	0 / 0	2 / 2	4 / 4	0 / 0	3 / 3	0 / 0	0 / 0	/	/	/	9 / 9
KENYA	0	23	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	/	/	/	/	0 / 0
CAMEROON***	4	15	0 / 0	0 / 0	1 / 1	0 / 0	0 / 0	1 / 1	2 / 2	1 / 1	/	/	/	/	5 / 5
PAKISTAN	0	0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	/	/	/	0 / 0
TOTAL*	8925	129834	2436 / 4478	2629 / 3937	2050 / 5682	3230 / 12833	6755 / 18840	7466 / 17226	5912 / 16537	5831 / 12877	2664 / 4839	0 / 0	0 / 0	0 / 0	29923 / 87261

\* Provisional  
 \*\* 1 case imported from Mali in September  
 \*\*\* 2 cases imported from Nigeria in July

## NINE COUNTRIES ATTEND PROGRAM REVIEW IN NOUAKCHOTT

All of the endemic francophone countries except Cameroon attended the Program Review held in Nouakchott, Mauritania, on October 27-31. The Mauritanian ministers of health and water supply represented the Government of Mauritania at the Opening Ceremony, which was also addressed by General A.T. Touré, the country representatives of WHO and UNICEF, and Dr. Donald Hopkins.

Overall, the nine represented francophone countries have reduced their reported cases of dracunculiasis in the first nine months of 1996 by **58%**, from 28,773 to 11,952, as compared to the same period of 1995. They have contained 63% of the cases in 1996, and they have reduced the number of **currently** endemic villages by **43%**, from 3,163 at the end of 1995, to 1,788 in the first nine months of 1996 (Table 1, Figures 1, 2, 4).

Niger reported 2,475 cases in 409 endemic villages so far in 1996 (vs. 12,652 cases and 759 endemic villages in 1995). This reduction of 80% in cases is the greatest reduction achieved by any of the endemic countries, despite Niger having been the third highest endemic country in 1995. 57% of the cases reported in 1996 were contained.

Burkina Faso reported 2,952 cases in 312 endemic villages (vs. 5,714 cases and 516 endemic villages in 1995). 66% of cases in 1996 were reported contained. However, reporting has been very delayed and the status of some interventions is uncertain. This program has not yet collected its Abate from Ghana. Some of the funding for the program has been delayed.

Mali reported 1,794 cases in 345 endemic villages (vs. 3,130 cases and 534 endemic villages in 1995). Of the cases reported so far this year, 41% are in **Mopti**, 27% in Gao, 16% in **Timbuktu**, and 15% are in Kayes Region. The alleged endemic area in **Kidal** Region of the far north needs to be confirmed. 59% of this year's cases so far have been contained.

Côte d'Ivoire reported 2,554 cases in 203 endemic villages (vs. 3,421 cases in 516 endemic villages in 1995). This is one of the smallest rates of reduction in cases (25%) by any endemic country. Of the cases reported so far in 1996, 85% are from only 5 of 19 sanitary districts: Bondoukou, **Bouafle**, **Seguela**, Dabakala, and Abengourou. 56% of the cases in 1996 were contained. The program has not yet claimed its **Abate** from Ghana.

Togo reported 972 cases in 187 endemic villages (vs. 1,300 cases and 252 endemic villages in 1995). This program reports having contained 100% of its cases in May-August this year, and 89% of all cases so far this year. The peak transmission season is November-December. The OCCGE conducted an **external** evaluation of this program in October; the report is not yet available. A "War Council" to launch the **final** national assault on **dracunculiasis** is being planned here for late December, involving high-level political authorities.

During January-August 1996, Benin reported 636 **cases** in 197 endemic villages (vs. 942 cases in 491 endemic villages in 1995). 102 of this year's endemic villages have only one case each. Almost 74% of cases are reported from **Zou** Department. 62% of cases this year have been contained. The peak transmission season is November-December.

Mauritania reported 464 cases in 122 **endemic villages** (vs. 1,248 cases and 255 endemic villages

in 1995). This is five times the number of cases that had been reported by Mauritania for 1996 up to just before the Program Review. The significant increase was due to delayed reports from Assaba, Guidimaka, and Gorgol, the three highest endemic areas of the country. The Government of Japan was agreed to help put 200 wells in the three highest endemic regions. This program has not yet collected its Abate from Ghana.

Chad reported only 100 cases, all of them contained, from 9 endemic villages for the first nine months of 1996 (vs. 110 cases in 39 endemic villages in the same period of 1995). One village, Hollom 3, in Fianga District of Mayo Kebbi Prefecture, has two-thirds of the cases reported in 1996. UNICEF has provided a new well in that village as of March 1996, and Abate has also been added to the interventions there this year. Chad intends to begin offering rewards for reporting of a case in 1997, as well as begin holding regular border meetings with Cameroon. The program observed National Guinea Worm Eradication Day on October 15.

Senegal reported 7 cases, all of them contained, in 5 endemic villages (vs. 38 cases in 15 endemic villages in 1995). One of the cases is believed to have been imported from Mali. Senegal recently obtained a grant of \$2,000 from Health and Development International to establish a reward system for reporting of cases. WHO will conduct an evaluation in December 1996, and begin pre-certification activities here (and in Cameroon, which has had 5 cases in 1996, including 2 cases imported from Nigeria).

Figure 2

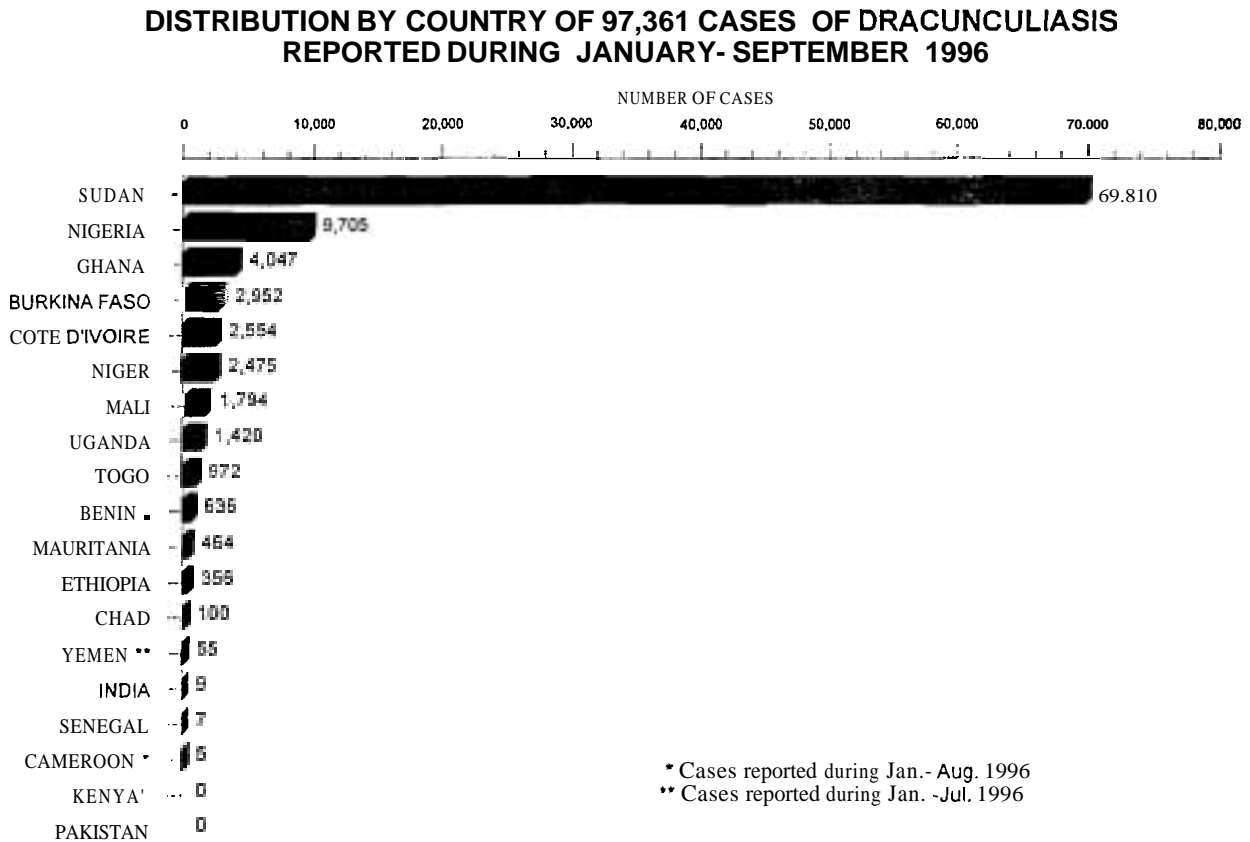
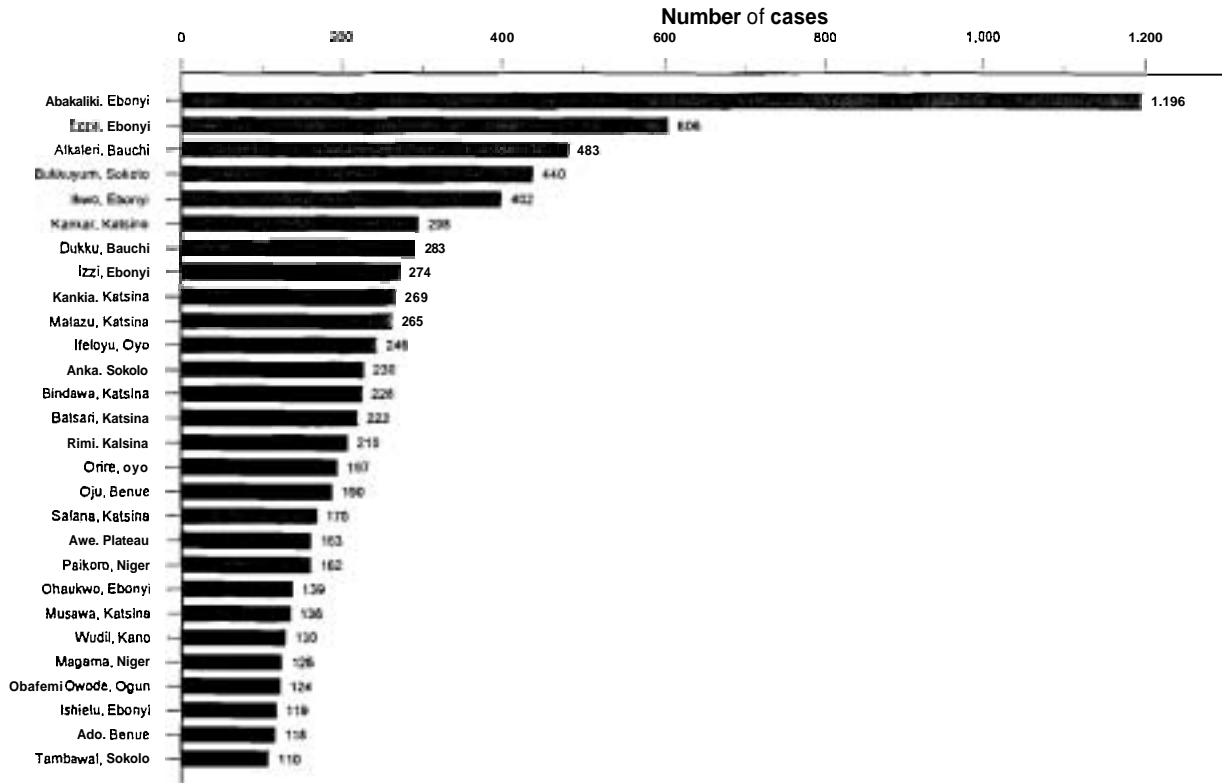


Figure 3

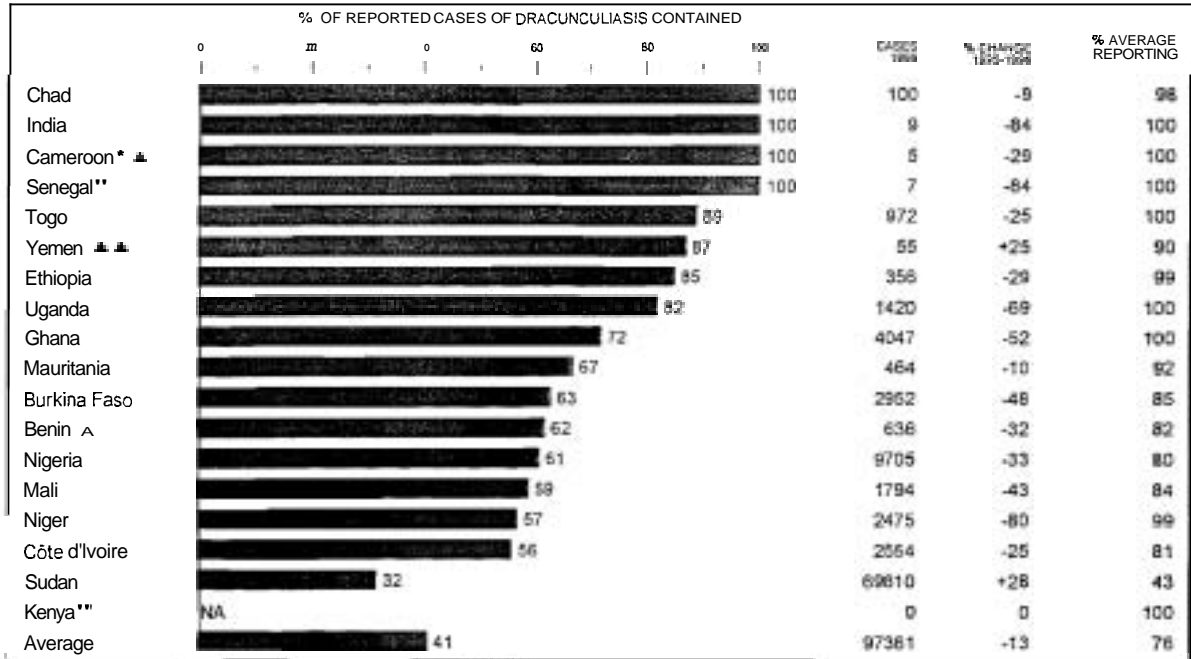
NIGERIA GUINEA WORM ERADICATION PROGRAM  
 28 LGAs REPORTING 7,546 (78%) OF 9,705 CASES REPORTED DURING JAN. - SEPT. 1996



**NIGERIA: SPECIAL INTERVENTION IN SOUTH-EAST ZONE**

As illustrated in Figure 3, four Local Government Areas (LGAs) in Ebonyi State (formerly part of Enugu State) accounted for more than two-thirds of all the cases reported from the South-East Zone of Nigeria so far this year. From October 14-24, 1996, Zonal Coordinator Prof. Eka Braide and others mounted an intensive Special Intervention effort against dracunculiasis in 553 endemic villages in the four LGAs of Abakaliki, Esza, Ikwo, and Izzi. The peak transmission period in this part of Nigeria, as in the South-West Zone of the country, occurs in October-March. The intent of the special effort is to achieve maximal impact by saturating the endemic villages in this, the highest endemic area of Nigeria, with all possible interventions (health education, community mobilization, cloth filters, provision of safe water and rehabilitation of wells, bandaging and other medical management of cases, use of Abate, case containment) at the onset of the period of peak transmission. Similar efforts are also indicated in Ifelaju LGA of Oyo State now, as well as in certain areas of Katsina, Sokoto, and Bauchi States in the north of Nigeria before the next peak period of transmission begins there in June.

**Figure 4** PERCENTAGE BY COUNTRY OF CASES CONTAINED, REDUCTION IN CASES COMPARED TO SAME PERIOD IN 1995, AND ENDEMIC VILLAGES REPORTING: JANUARY - SEPTEMBER \* 1996



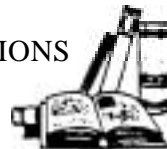
† Provisional  
 † Reported 2 imported cases from Nigeria in July  
 \* Reported 1 case imported from Mali in September  
 \*\*\* Reports from 19 villages under surveillance  
 † Jan. - Aug. data only  
 † † Jan. - July data only  
 NA Not applicable

**PEACE CORPS ESCALATES ACTIONS AGAINST DRACUNCULIASIS**



Dr. Joy Barrett reported at the 32nd Meeting of the Interagency Coordinating Group in Atlanta on November 4 on an initiative by U.S. Peace Corps to increase its efforts against dracunculiasis as the eradication campaign enters its final stages. Peace Corps is proposing that as many Peace Corps Volunteers (PCVs) as possible working in endemic areas of ten African countries, regardless of their primary assignments, be provided instruction and materials to prepare them to help share information about dracunculiasis and its prevention with members of the communities where they live and work. Up to now, smaller groups of PCVs have been designated to work on dracunculiasis, mostly full-time. This initiative could conceivably extend Peace Corps' anti-dracunculiasis activities to up to 1,000 PCVs now serving in Benin, Burkina Faso, Cameroon, Chad, Côte d'Ivoire, Ghana, Mali, Mauritania, Niger, and Togo.

**RECENT PUBLICATIONS**



Anonymous, 1996. Guinea-worm eradication programme. *World Health*, 49(May-June):24.  
 Anonymous, 1996. Technology aids eradication campaign. *World Health*, 49(May-June):28.  
 Biswas G, Dutta KK, 1996. Mission almost accomplished. *World Health*, 49(May-June):26-27.  
 Chippaux J-P, 1996. Guinea-worm disease. *World Health*, 49(May-June):29-31.

**IMPORTATIONS AND EXPORTATIONS OF CASES**



Reports provided during the Program Review meetings in Nairobi, Kenya (September 23-27) and Nouakchott, Mauritania (October 27-31) indicated that a total of 86 imported cases were detected in 12 countries during January-October, 1996 (Table 2). However, only 12 (14%) of the 88 cases were reported to have been contained and 19 (22%) to have been cross-notified to the country of origin through WHO. Epidemiologic investigation of many of the importations is still ongoing. National coordinators were urged to expedite these investigations and to notify these cases immediately to the country of origin through WHO (a suggested report form appeared on page 8, GW Wrap-Up #57). Reports of importations should be officially routed to the country of origin through the local WHO Representative, a copy of the case report form should be sent by FAX to Dr. Alhousseini Maiga, c/o WHO Representative, Ougadougou, Burkina Faso (FAX: 226-33-25-41), and copies should be sent to collaborating agencies and organizations (CDC, Global 2000, UNICEF). Each report of an imported case should be treated with urgency and immediately forwarded to all who need to know.

**Table 2**  
REPORTED IMPORTATIONS OF CASES OF DRACUNCULIASIS: JAN. - OCT. 1996

From	To	Month	Cases		
			Number	Contained	Cross notified
Benin	Nigeria	August	5	?	5
Burkina Faso	Niger	August	2	0	2
		Côte d'Ivoire	June	1	1
		August	1	1	?
		September	1	1	?
Côte d'Ivoire	Burkina Faso	Jan.-Sept.	8	?	?
Ghana	Togo	January	2	?	?
		February	6	?	?
		March	1	?	?
		June	1	1	1
	Burkina Faso	Jan.-Sept.	6	?	?
Nigeria	Benin	Jan. - Aug.	11	?	?
		Togo	February	1	?
		May	1	?	1
	Niger	June	2	1	2
	Cameroon	July	2	2	2
Niger	Burkina Faso	Jan.-Sept.	2	?	?
	Côte d'Ivoire	August	1	1	?
Mali	Senegal	September	1	1	pending
	Côte d'Ivoire	February	1	1	?
Togo	Benin	Jan. - Aug.	17	?	?
		Côte d'Ivoire	September	1	1
	Ghana	June	3	?	?
Senegal	Mali	June	3	?	?
		October ?	1	?	1
Sudan	Uganda	March	1	0	1
		May	3	0	3
		July	1	0	1
	Ethiopia	August	1	1	pending
	C.A.R.	?	1	?	?
Total			88	12	19

*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.