



# Memorandum

Date June 7, 1996



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

Subject GUINEA WORM WRAP-UP #57

To Addressees

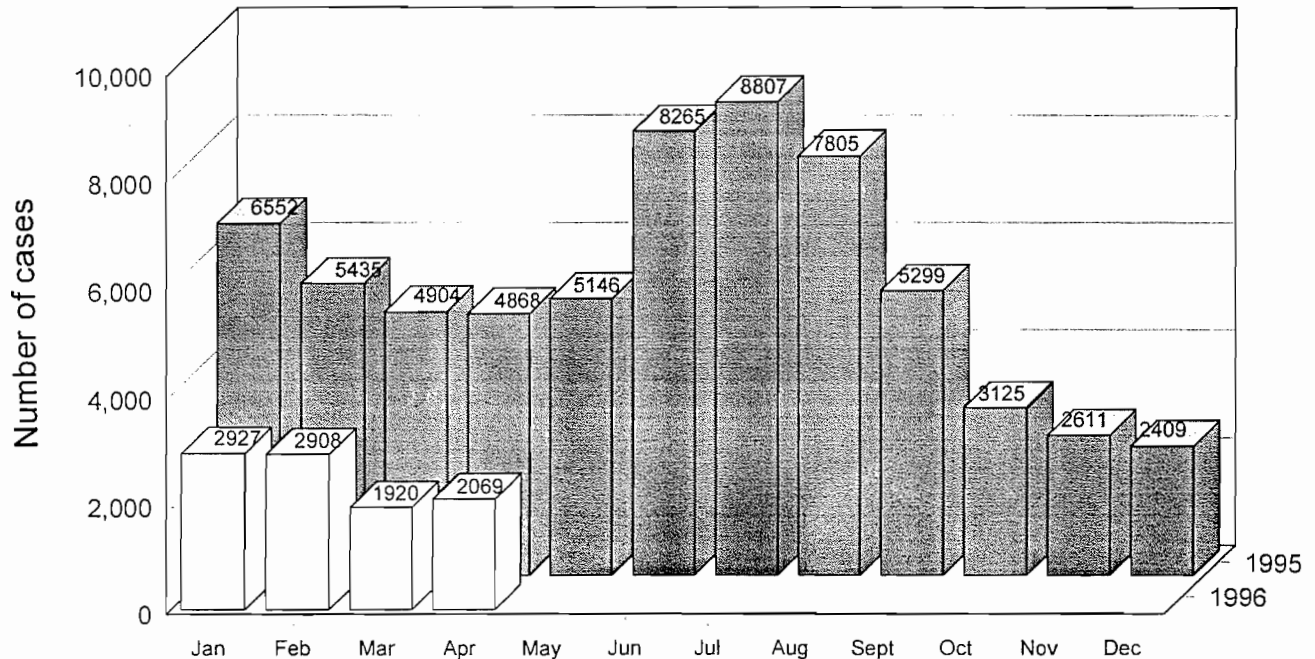
## Detect Every Case, Contain Every Worm!

### MOST COUNTRIES REDUCE INCIDENCE BY 55%, CONTAIN 71% OF 1996 CASES

During the first four months of 1996, all other endemic countries except Sudan reduced the incidence of dracunculiasis by an average of 56%, as compared to the same period of 1995. The monthly percentage reductions were 55%, 46%, 61%, and 57%, respectively, for January-April (Figure 1).

Figure 1

REPORTED CASES OF DRACUNCULIASIS IN 1995 AND 1996 FROM ALL ENDEMIC COUNTRIES EXCEPT SUDAN

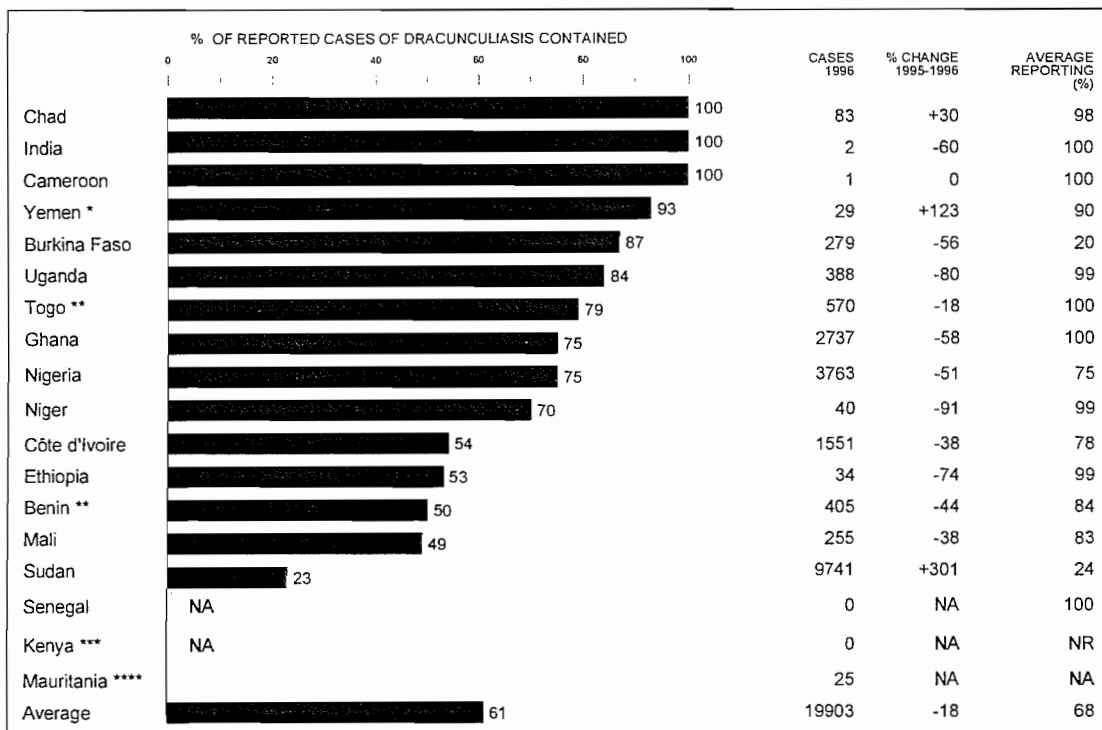


\* Provisional

Even more important, since it reflects this year's most relevant work, is that the same countries contained 71% of the 9,482 cases they have reported so far during the first four months of 1996 (Figure 2, Table 1). The percentages of cases that were contained by these countries in each of the first four months of 1996 are 67%, 76%, 73%, and 71%. Between 1994 and 1995, these other endemic countries besides Sudan reduced the incidence of dracunculiasis by 42% (vs. 55% now); and during 1995 they contained 52% of their 65,226 cases (vs. 71% now). The urgent goal, of course, is to contain as close to 100% of cases as possible in each endemic country.

Figure 2

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



\* April report is partial  
 \*\* % Reporting for Jan. - March 1996 only  
 \*\*\* Reports for January and February 1996 only.  
 \*\*\*\* Cases reported for April 1996 only  
 NA Not applicable  
 NR Not reported  
 † Provisional

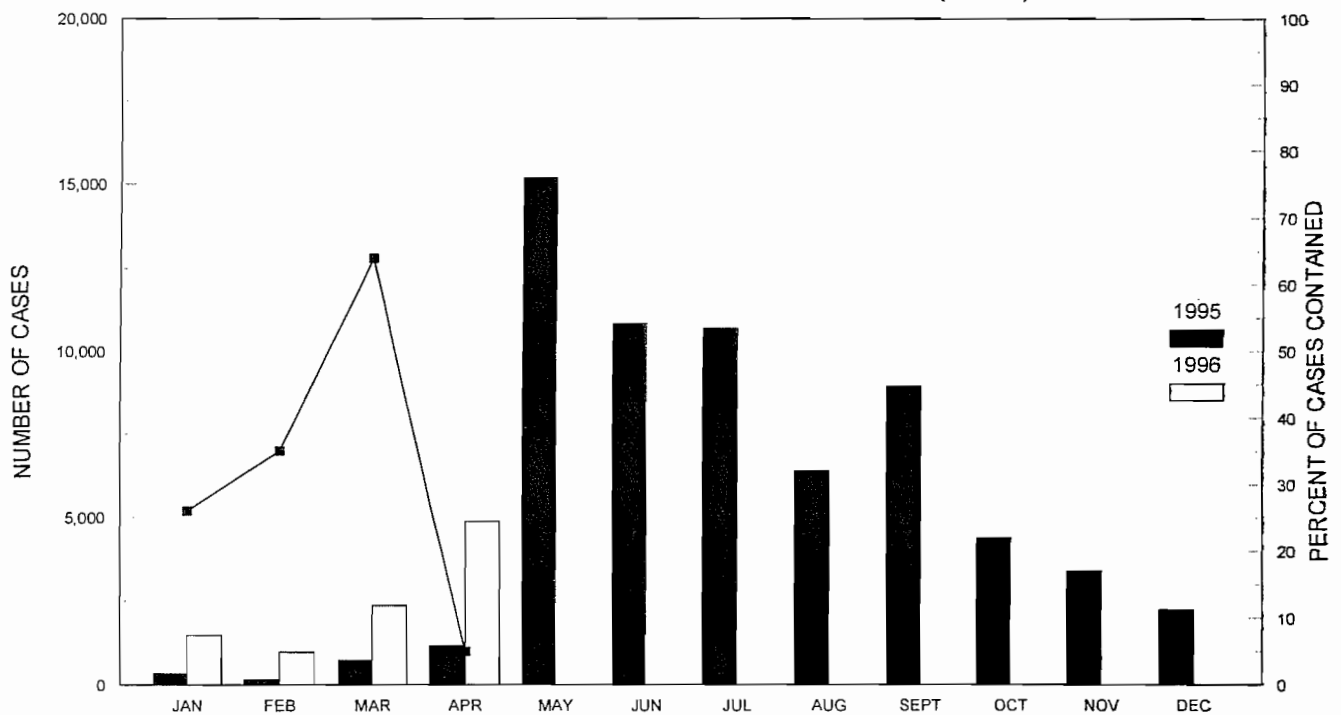
**SUDAN REPORTS 49% OF GLOBAL 1996 CASES SO FAR, CONTAINS 23%**

As indicated in Table 1, Sudan has reported a provisional total of 9,741 cases for 1996 through the end of April. (May-September are the months of peak incidence in Sudan). This is an increase of 301% over the 2,429 cases reported in Sudan during the same four months of 1995, just before reporting improved during the cease-fire. It also represents 49% of the total number of cases reported from all endemic countries in January-April this year. An average of 23% of known endemic villages reported in Sudan in all of 1995, and 24% so far in 1996. About 23% of cases reported so far in 1996 have reportedly been contained.

The Sudan GWEP continues to suffer from the insecurity in parts of southern Sudan. In the period up to May 14 this year, for example, reportedly 15 evacuations of NGOs working in that part of Sudan have been necessary. And according to studies undertaken as part of a recent consultation, sustained transmission in the northern states is apparently being reduced, but continued migration of displaced populations from highly endemic areas of southern Sudan is sustaining a steady importation of dracunculiasis cases into the northern states. Despite these difficulties, dedicated Sudanese health officials on both sides, and medical workers from several NGOs, Operation Lifeline Sudan (OLS), UNICEF, Global 2000, and WHO continue to record some advances against dracunculiasis in Sudan. These are manifest by the significant numbers of cases being reported from accessible areas this year (without a cease-fire) (see Table 1), as well as by the interventions which are now being conducted, especially health education, distribution of cloth filters, and case containment. The next national review meeting will be held in Khartoum, June 24-26. It will be followed by the 5th Coordination Meeting between representatives from the OLS Southern Sector, officials of the national program, and representatives of key assisting agencies.

Figure 3

**SUDAN GUINEA WORM ERADICATION PROGRAM  
NUMBER OF CASES REPORTED IN 1995 AND 1996 ( BARS )  
AND % OF CASES CONTAINED IN 1996 ( LINE )**



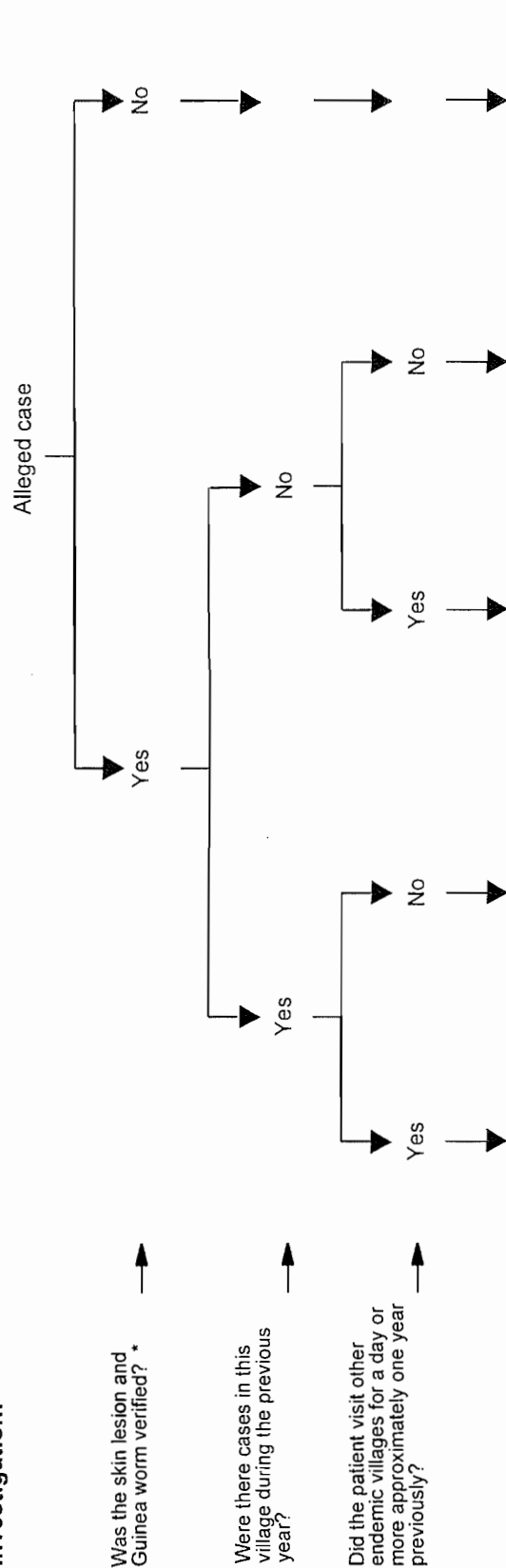
**ERRATUM**

*In the previous issue of GW Wrap-Up, the name of the National Program Coordinator for Cameroon was misspelled - it should have been Dr. Ncharre Chouaïbou. We regret the error.*

Figure 4

# Investigation of an alleged case of dracunculiasis

## Investigation:



## Conclusion:

**Recommended Actions:** Make sure that case was properly contained.

Indigenous or imported case  
 No additional action if case was contained and if village has been recognized as endemic, and has a trained VBHW for surveillance and case containment.  
 If not, find out why case was not contained and take remedial actions to improve case detection and containment.

Indigenous case  
 No additional action if case was contained and if village has been recognized as endemic, and has a trained VBHW for surveillance and case containment.  
 If not, find out why case was not contained and take remedial actions to improve case detection and containment.

Probable imported case  
 No additional action if case was contained. If not, declare the village endemic. Train a VBHW to do surveillance and case containment.  
 Find out names of villages visited and determine if these are known to be endemic.  
 If importation is from another country, report the case to WHO immediately.

Probable indigenous case (zoonotic origin?)  
 Investigate possible antecedent cases in village one year previously.  
 If case was not contained, declare the village endemic. Train a VBHW to do surveillance and case containment.  
 Try to obtain a piece of the worm and send it to CDC for identification.

False report  
 None

\* Declare case verified only when: 1) a program supervisor sees a Guinea worm emerging, or 2) when the Guinea worm has been pulled out, and a supervisor has seen the preserved worm, and corroborated the worm emergence of the alleged patient with family members and/or neighbors, and/or with local doctor or public health worker.

A case of dracunculiasis is defined as an individual exhibiting or having a history of a skin lesion with the emergence of Guinea worm.

## INVESTIGATION OF ALLEGED CASES AND NOTIFICATION OF IMPORTED CASES

As cases become fewer at this stage of the eradication campaign, prompt, careful investigation and follow-up of alleged cases of dracunculiasis are increasingly important, and will continue to increase in importance through the three-year pre-certification period in each endemic country. Correct confirmation (or rejection) of the presumed diagnosis of dracunculiasis in such cases is critical. The intent in Figure 4 is to provide general guidance to national program coordinators, program supervisors, and others during investigation of alleged cases of dracunculiasis. Similarly, it is increasingly important that national programs thoroughly investigate the origin of cases which may have been imported, either from another country or from an area within the same country believed to have been free of the disease. When a case is thought to have been imported from another country, it is essential that the national program coordinator IMMEDIATELY cross-notify the case through the WHO Country Representative to the apparent country of origin. (See form in Figure 6 (p. 8) prepared by an interagency group in 1994.

### IN BRIEF:

Program personnel from Niger and Nigeria held their first joint border meeting on May 22-23, in Maradi, Niger. The meeting, which was attended by representatives from both national programs and from border states (except Sokoto), departments, and zones, and which included useful exchanges and discussion of epidemiologic and program information from each side, was conducted in English, French, and Hausa. Regular monthly meetings are planned at the local level, and more infrequently at the national level. Nigeria's program will hold an external evaluation beginning June 7, with external support provided by UNICEF/Nigeria, Global 2000, CDC and WHO/Nigeria. 59% of Nigeria's cases in April were reported from Enugu State (see Figure 5).

Of the 535 cases reported from Ghana in April, 470 (or 88%) were from the Northern Region. 71% of cases in the Northern Region met case containment criteria (see also Figure 5). One-third of the 419 different villages that have reported cases so far this year were not infected in 1995. The International Christian Youth Exchange has recruited seven volunteers to work in the Ghanaian program. All regional coordinators will meet in Accra on June 11. Togo reports having imported from Ghana: 2 cases in January, 6 in February, and 1 in March. In addition, 1 case was imported from Nigeria in February.

Uganda will hold its annual national Guinea Worm Eradication Conference on July 22-23. As of April 1996, this program had recorded a cumulative total of 386 cases (vs. 1,903 cases in the same period of 1995, a reduction of 80%), of which 84% were contained. A cumulative total of 121 villages have reported cases so far in 1996. 99.6% of 834 endemic villages reported in April. The months of April, May, and June are the peak transmission months in Uganda.

#### DEATH OF MRS. TSOLAYE SAGAY

*We regret that Mrs. Tsolaye Sagay, the data manager for the Nigerian Guinea Worm Eradication Program, died of cancer on May 5. She was an exceptionally talented, brave, and dedicated worker who attended the African Regional Conference in Accra less than six weeks before her death. She will be sorely missed by her family, friends, and co-workers.*

Table 1

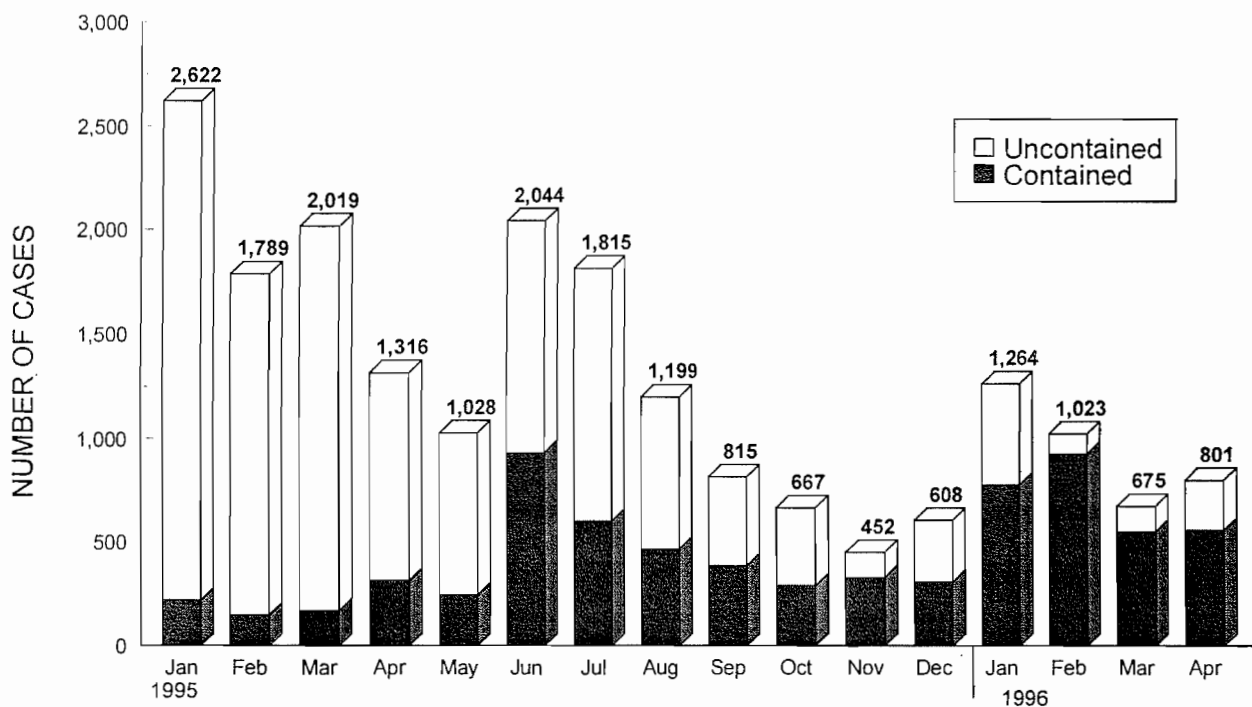
NUMBER OF CASES CONTAINED AND NUMBER REPORTED BY MONTH, 1996  
(COUNTRIES ARRANGED IN DESCENDING ORDER OF CASES IN 1995)

COUNTRY	# OF ENDEMIC VILLAGES: 1/1/96	NUMBER OF CASES IN 1995	NUMBER OF CASES CONTAINED / NUMBER OF CASES REPORTED												TOTAL*	
			JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER		
SUDAN	1932	64608	387 / 1498	341 / 988	1458 / 2371	280 / 4884	117 / 1258	/	/	/	/	/	/	/	/	2583 / 10999
NIGERIA	1846	16374	778 / 1264	926 / 1023	562 / 675	559 / 801	/	/	/	/	/	/	/	/	/	2825 / 3763
NIGER	750	13821	17 / 25	2 / 5	0 / 0	9 / 10	/	/	/	/	/	/	/	/	/	28 / 40
GHANA	1057	8894	467 / 611	657 / 863	538 / 728	388 / 535	/	/	/	/	/	/	/	/	/	2050 / 2737
BURKINA FASO	516	6281	24 / 27	35 / 46	27 / 31	156 / 175	/	/	/	/	/	/	/	/	/	242 / 279
UGANDA	810	4810	41 / 48	22 / 24	28 / 40	233 / 276	/	/	/	/	/	/	/	/	/	324 / 388
MALI	534	4218	49 / 76	8 / 15	14 / 19	54 / 145	/	/	/	/	/	/	/	/	/	125 / 255
COTE D'IVOIRE	252	3801	241 / 369	303 / 598	146 / 271	153 / 313	/	/	/	/	/	/	/	/	/	843 / 1551
TOGO	302	2073	200 / 227	168 / 194	38 / 96	53 / 53	/	/	/	/	/	/	/	/	/	459 / 570
BENIN	491	2273	133 / 256	56 / 94	14 / 23	/ 32	/	/	/	/	/	/	/	/	/	203 / 405
MAURITANIA	255	1762	/	/	/	/ 25	/	/	/	/	/	/	/	/	/	0 / 25
ETHIOPIA	77	514	0 / 1	1 / 4	2 / 2	15 / 27	/	/	/	/	/	/	/	/	/	18 / 34
CHAD	39	149	22 / 22	34 / 34	22 / 22	5 / 5	/	/	/	/	/	/	/	/	/	83 / 83
YEMEN	21	82	0 / 1	7 / 8	12 / 12	8 / 8	/	/	/	/	/	/	/	/	/	27 / 29
SENEGAL	15	76	0 / 0	0 / 0	0 / 0	0 / 0	/	/	/	/	/	/	/	/	/	0 / 0
INDIA	24	60	0 / 0	0 / 0	0 / 0	2 / 2	/	/	/	/	/	/	/	/	/	2 / 2
KENYA	0	23	0 / 0	0 / 0	/	/	/	/	/	/	/	/	/	/	/	0 / 0
CAMEROON	4	15	0 / 0	0 / 0	1 / 1	0 / 0	/	/	/	/	/	/	/	/	/	1 / 1
PAKISTAN	0	0	0 / 0	0 / 0	0 / 0	/	/	/	/	/	/	/	/	/	/	0 / 0
TOTAL*	8925	129834	2359 / 4425	2560 / 3896	2862 / 4291	1915 / 7291	117 / 1258	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	9813 / 21161

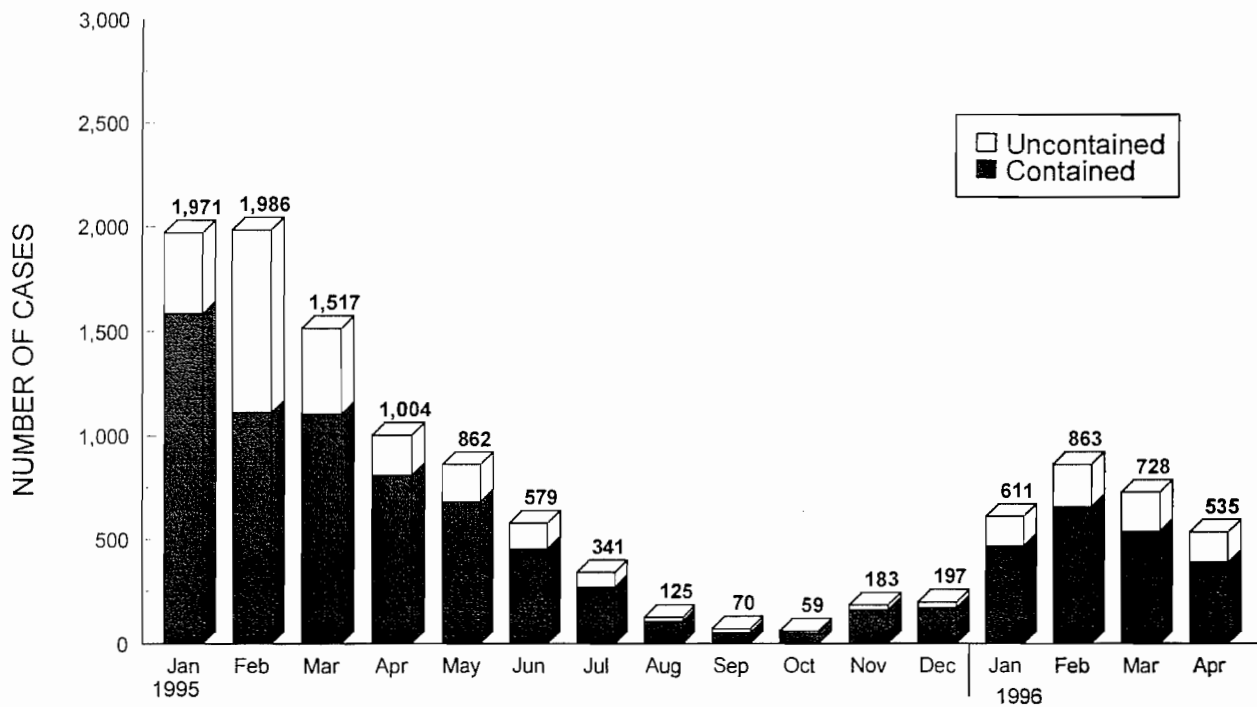
\* Provisional

Figure 5

**NIGERIA GUINEA WORM ERADICATION PROGRAM  
NUMBER OF CASES OF DRACUNCULIASIS  
REPORTED AND CONTAINED: JANUARY 1995 - APRIL 1996**



**GHANA GUINEA WORM ERADICATION PROGRAM  
NUMBER OF CASES OF DRACUNCULIASIS  
REPORTED AND CONTAINED: JANUARY 1995 - APRIL 1996**



**MEETING**

The International Commission for the Certification of Dracunculiasis Eradication will hold its second meeting in Cairo, Egypt, on September 23-24.

**RECENT PUBLICATIONS**



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

WHO, 1996. Dracunculiasis: Global surveillance summary, 1995. Wkly Epidemiol Rec, 71:141-148.

**Figure 6**

**PROPOSED REPORTING FORM FOR CASES IMPORTED FROM OTHER COUNTRIES**

<b>DETECTION OF CASE</b> 1. Country: _____ 2. Full name of patient: _____ 3. Age: _____ Sex: _____ 4. Name of Village of reporting: _____ 5. District: _____ 6. Region: _____ 7. Date of arrival in village: _____ 8. Date of worm emergence: _____ 9. Date case confirmed: _____ 10. Confirmed by: _____	Case reference number in country where detected (if applicable): _____
	Date form sent to WHO: _____ Completed by: _____ (Officer of national program)
	Comments/actions taken by WHO: _____
<b>PRESUMED ORIGIN OF CASE</b> 11. Country: _____ 12. Name of village: _____ 13. Name of household head: _____ 14. District: _____ 15. Region: _____ 16. Date of departure from village: _____ 17. Remarks (for example, water sources possibly contaminated in places of origin, other patients, other villages potentially involved): _____	Date received by WHO in country of origin: _____
	Date national program advised: _____ Date district of origin advised: _____ Name and signature: _____
	Action taken in country of origin: _____

*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.*

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) 448-4532.



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