




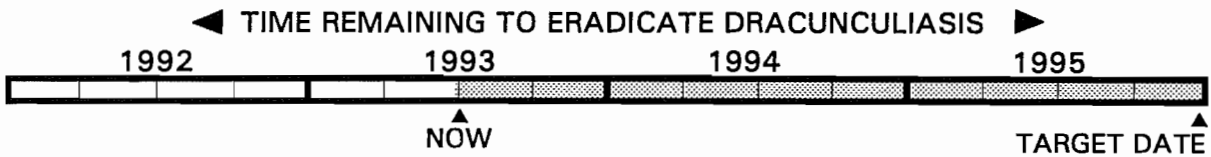
Memorandum

Date July 9, 1993

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

Subject GUINEA WORM WRAP-UP #40

To Addressees



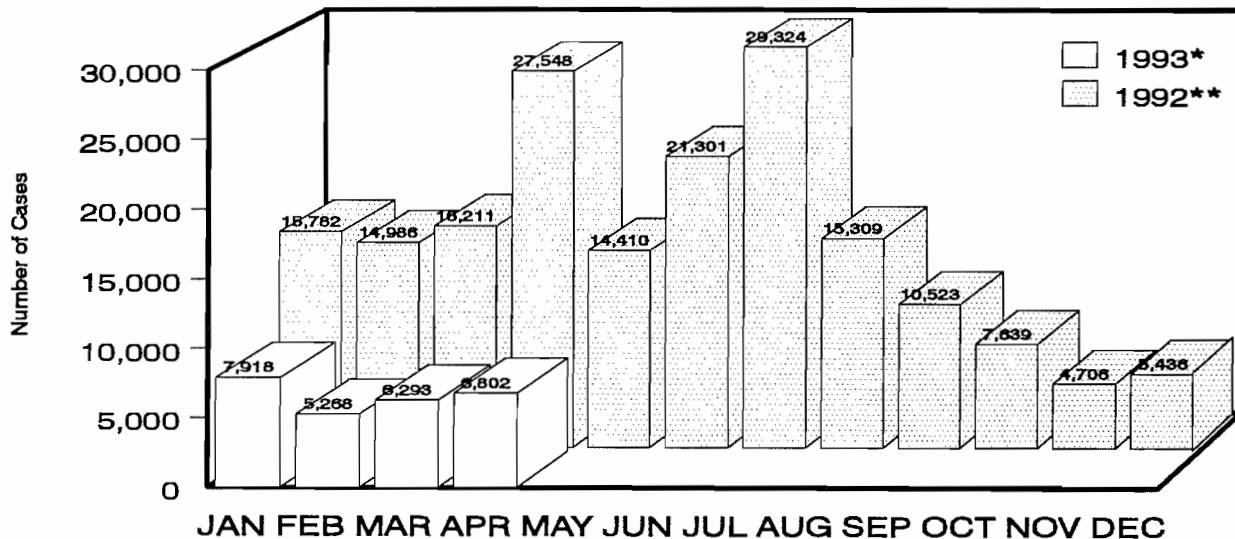
NIGERIA ACHIEVES 65% REDUCTION IN JANUARY-APRIL 1993



The latest monthly reports of cases of dracunculiasis in Nigeria reveal that the Guinea Worm Eradication Program has reduced the numbers of cases of dracunculiasis from 74,527 cases reported in January-April 1992 (average of 73% of endemic villages reporting) to 26,281 cases reported for the same four months of 1993 (average of 80% endemic villages reporting): a reduction of 64.7% (Figure 1).

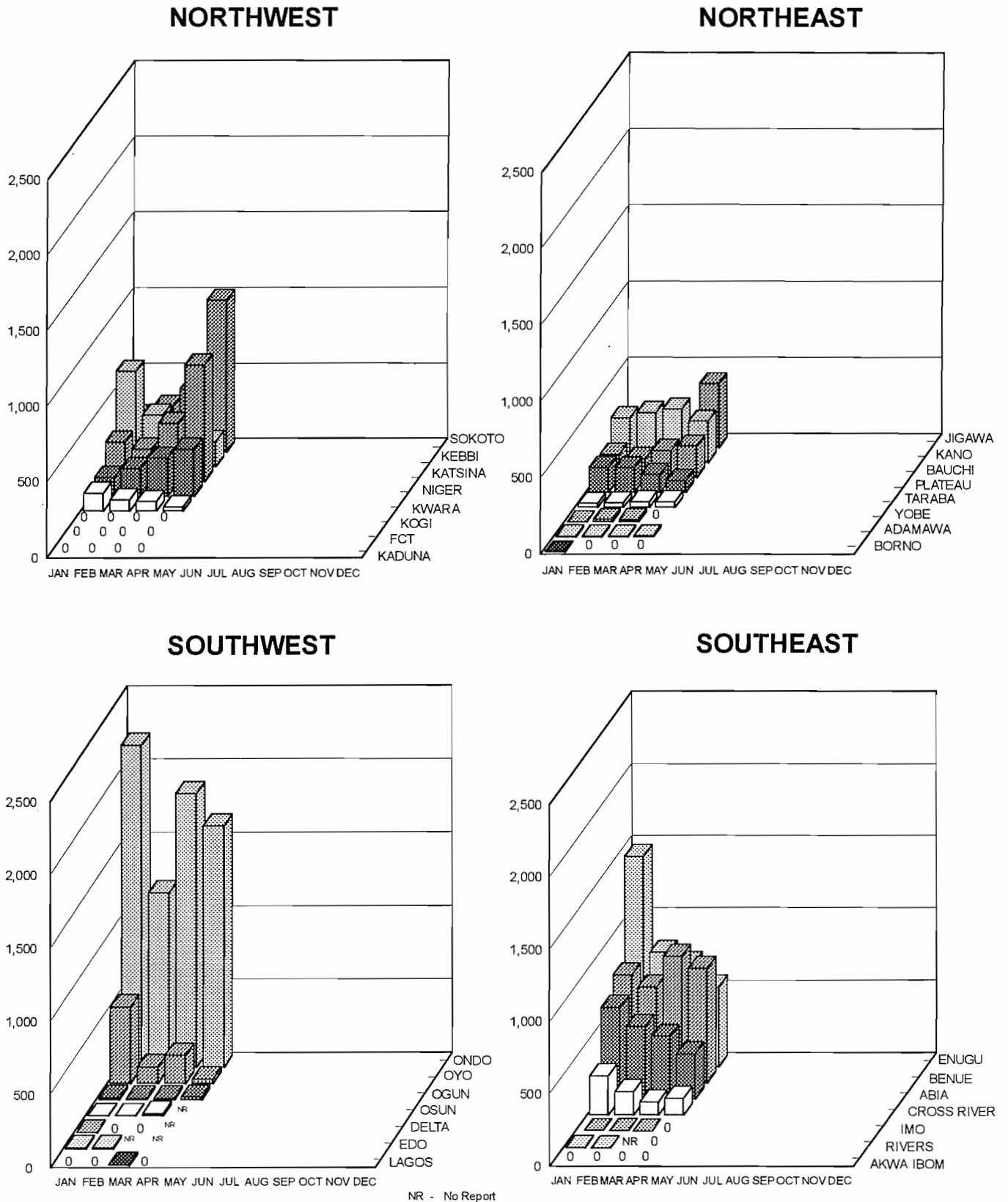
Graphs of the cases reported by state in Nigeria so far this year are given in Figure 2. The program is working to improve the rate of monthly reporting further, and to intensify interventions in endemic villages. Training has been conducted in three of the four zones to extend the use of Abate for vector control in selected villages. Abate is being applied already in parts of Plateau and Ondo States.

Figure 1 NUMBER OF CASES OF DRACUNCULIASIS REPORTED BY MONTH
NIGERIA GUINEA WORM ERADICATION PROGRAM



* Provisional percent reporting: 83% January, 78% February, 83% March, and 77% April.
** 73% of 5,607 endemic villages reported monthly on average

**Figure 2 NIGERIAN GUINEA WORM ERADICATION PROGRAM
NUMBER OF CASES BY ZONE AND STATE: 1993**



CAMEROON HAS ONLY 9 CASES BY LATE JUNE; PAKISTAN HAS 1 CASE



By the end of June 1992, Cameroon had recorded a cumulative total of 26 cases of dracunculiasis (Cameroon reported a total of 127 cases for all of 1992). According to a report provided to ITECH by Dr. Dama Mana, only 9 cases had been detected so far in 1993 as of June 30: 2 cases in March, 2 cases in May, and 5 cases in June (the peak transmission season is May-September). Two of the worms were extracted surgically before emergence by Dr. Dama, who learned the technique in Ghana in April this year. The first five cases occurred in five villages. A total of 41 Cameroonian villages are under weekly surveillance; another 20 villages at risk are under monthly surveillance.

Pakistan, which reported 23 cases in 1992 and 106 cases in 1991, has detected one case in 1993: a 10-year old girl from the village of Ganju, in North West Frontier Province (Table 1). This was the most highly endemic village in Pakistan since the eradication program began there in 1987. The case was under surveillance since two days before the worm emerged. Appropriate measures for case containment were taken, including hospitalization of the patient.

Table 1

MONTHLY REPORTING OF CASES OF DRACUNCULIASIS IN 1993
(June 1993)

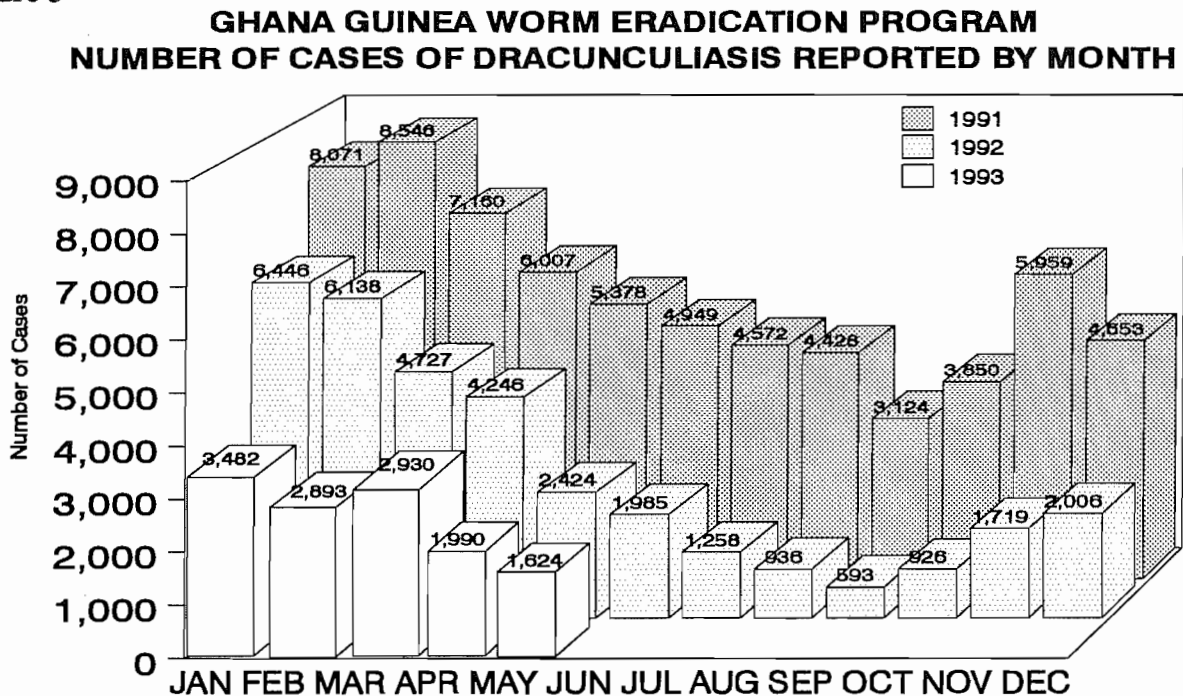
COUNTRY	ANNUAL INCIDENCE (YEAR)	NUMBER OF CASES: 1993					
		JAN	FEB	MAR	APR	MAY	JUNE
Nigeria	183,169 (1992)	7918	5268	6293	6802		
Uganda	123,259 (1991)	4392	3482	2625	3276	2825	
Burkina Faso	42,187 (1990)						
Benin	37,414 (1990)	609	330	102			
Ghana	33,464 (1992)	3482	2893	2930	1990	1625	
Niger	31,676 (1991)						
Cote d'Ivoire	20,064 (1991)						
Mali	17,716 (1991)						
Mauritania	8,063 (1990)						
Togo	6,381 (1992)	1236	1308	520	285	51	
Sudan	2,447+ (1992)						
Senegal	1,686 (1991)						
India	1,081 (1992)						
Ethiopia	303+ (1992)						
Chad	156+ (1993)						
Cameroon	127 (1992)	0	0	2	0	2	5
Pakistan	23 (1992)	0	0	0	0	0	1
Kenya							

At this stage of the eradication program, all endemic countries should be reporting cases monthly. Table 1 gives the data available to the WHO Collaborating Center at CDC for 1993 so far. We shall update this table in each subsequent issue of Guinea Worm Wrap-Up.

GHANA: 46% REDUCTION IN CASES IN JANUARY-MAY 1993

Ghana has reported a total of 12,920 cases of dracunculiasis in the first five months of 1993 as compared to 23,981 cases in the first four months of 1992: a reduction of 46% (Figure 3). Rates of reporting were 99.4% of 3220 endemic villages reported in January, 96% of 3275 endemic villages reported in February, 98% of 3376 villages in March, 99% of 3399 endemic villages in April, and 98% of endemic villages in May. During 1992, 3100 villages reported cases in Ghana. So far, 299 additional villages have reported cases in 1993 (not all of the 3100 villages that reported at least one case in 1992 have reported any cases in 1993). Since the previous issue of Guinea Worm Wrap-Up, Ghana has increased the proportion of its endemic villages where Abate is being used for vector control to about 39% (from 21%). From May 9-26, Dr. Karl Kappus from the WHO Collaborating Center for Research, Training, and Eradication of Dracunculiasis at the Centers for Disease Control and Prevention (CDC) consulted in Ghana on strengthening of case containment. UNICEF/Ghana has provided an additional 24.4 million cedis (about US\$40,000) and 3 motorbikes for the program.

Figure 3



The 1993 Jimmy and Rosalynn Carter Awards for meritorious contributions to Ghana's Guinea Worm Eradication Program were presented to five highly deserving recipients on April 25th. Three of those selected are Guinea Worm Regional Coordinators: Mr. Edward Gargrah of Central Region, Mr. Yohannes Atowu of Greater Accra Region, and Mr. Thomas Abachie from Upper East Region. These three regions reduced their cases of dracunculiasis by 79-100% over the past year. The other two recipients are Mr. Francis Ayensu and Mr. David Zanu of the Ministry of Health's Parasitic Diseases Unit, who trained regional and district staff in the application of Abate (temephos).

COTE D'IVOIRE: 47 MORE ENDEMIC VILLAGES



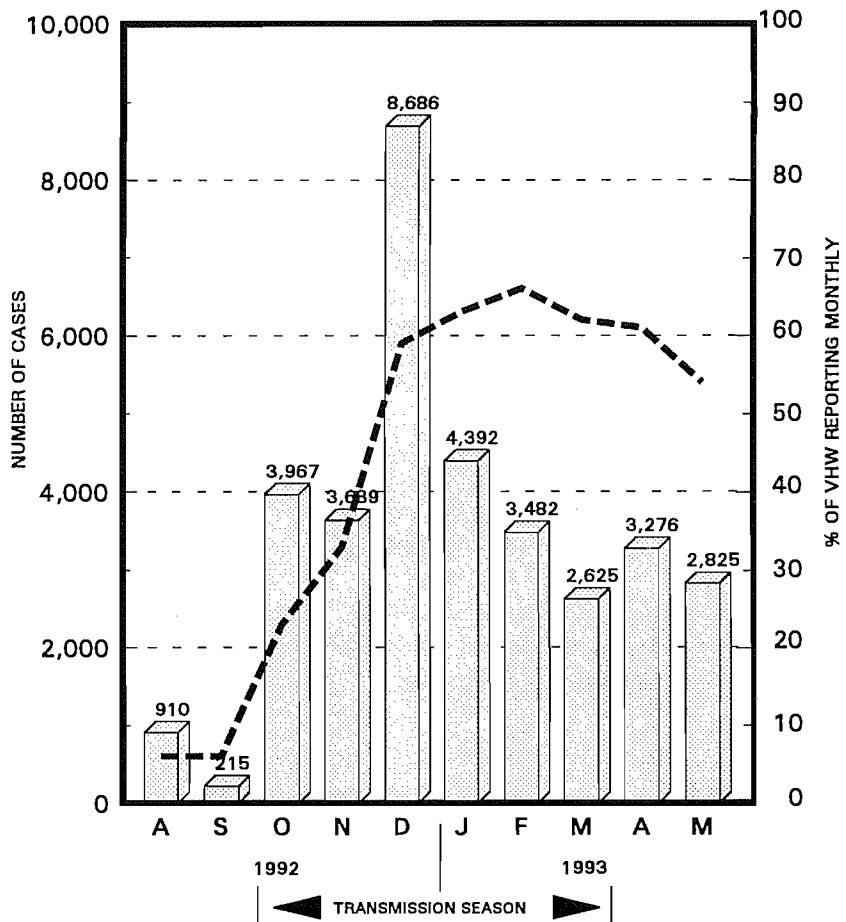
The number of known endemic villages in Cote d'Ivoire is now 550, including 47 villages recently discovered to have been endemic (503 endemic villages were found during the case search in 1990-91). Meanwhile the program is accelerating training of village-based health workers to conduct health education and other interventions in affected villages. About 20% of the 550 villages had trained personnel at the end of May (up from 12% as of March), and 49% (272 villages) were to have trained workers by August this year, with the assistance of UNICEF. Health workers for the remaining 278 endemic villages are to be trained using assistance provided recently by Global 2000. The first shipment of nylon filter material arrived in country in June. U.S. Peace Corps plans to assign 5 more of its volunteers to work on Guinea worm eradication full time, beginning later this year, in response to a request by the Ivoirian government.

Figure 4

UGANDA: INCREASING INTERVENTIONS; NATIONAL WORKSHOP HELD IN JUNE

Uganda convened its first national workshop on June 24-25, to review the progress of the campaign to date, and to present the final report of the national case search. At the end of June, Uganda's Guinea Worm Eradication Program had trained village-based health workers in 96% of its 2677 known endemic villages (up from 84% in March), and distributed nylon cloth filters to over 45% of endemic villages (up from 15% in March). A course to train trainers for the use of Abate in selected areas is being planned for August 1993. A total of 17,564 cases of dracunculiasis were reported from Uganda between January and May 1993 (Figure 4). This program is being assisted by the Church of Uganda in Kotido District, by CUAMM (Collegio Universitario Asapiranti e Medici

UGANDA GUINEA WORM ERADICATION PROGRAMME MONTHLY INCIDENCE AND % OF VILLAGE HEALTH WORKERS REPORTING CASES IN KITGUM DISTRICT



Missionari) and Lutheran World Federation in Moroto District, and by AVSI (Associazione Volontari per il Servizio Internazionale) in Kitgum District, in addition to UNICEF and Global 2000.

MALI: TRAINING BEGINS, GENERAL TOURE TOURS ENDEMIC AREAS



As of the end of June, 166 (13.4%) of the 1230 known endemic villages in Mali had at least one intervention in place (up from 6% in March: 62 villages in Kayes Region (assisted by Kayes Protestant Mission and Africare), and 104 villages in Mopti Region (assisted by IMPACT, Peace Corps, and UNICEF). The proportion of endemic villages with at least 1 intervention in place is expected to be over 30% by the end of July. Training of trainers for village-based health workers began in Kayes in April, and in Mopti and Segou in May. The president of the

Intersectoral Committee, former head of state General Amadou Toumani Toure, toured 5 endemic villages of Kayes in April and other endemic areas of Mopti and Segou Regions in May. He was accompanied by the national program coordinator, Dr. Issa Degoga, and other officials. The program has also completed the case search of Sikasso Region, where a provisional total of 26 cases of dracunculiasis were detected in 5 villages for 1992 (the report of this search is not yet available). A team from Japan was scheduled to arrive in Bamako in early July to assess Mali's request for assistance by that government in providing safe drinking water for some of the endemic villages.

SEVEN FRANCOPHONE COUNTRIES OBSERVE NATIONAL GUINEA WORM DAY

For the second year, endemic francophone countries observed a common National Guinea Worm Eradication Day on April 30th. This year, all of the endemic francophone countries marked the observance except Cameroon (which will observe its National Guinea Worm Day in December), Chad (which was conducting its case search), and Senegal. Some highlights of these observances are as follows:

In Benin, a ceremony that included a speech by the Minister of Energy, Mines and Hydraulics was held in the Sub-Prefecture of Bopa in Mono Department, and received wide coverage in the mass media.

In Burkina Faso, messages were transmitted by television and radio on April 27-29, followed by a ceremony attended by the Minister of Health, Social Action and Family Affairs, held at Ouahigouya, in Yatenga Province.

In Cote d'Ivoire, television and radio coverage also commenced on 27 April, followed by a ceremony held at Yorobodi, in highly-endemic Bondoukou Prefecture, that included a speech by the Minister of Health and Social Protection.

Mali's celebration included a live radio interview with General A. Toumani Toure (in which he recalled that his mother was kept out of school as a child because of Guinea

worm), as well as specially prepared banners, T-shirts, calendars, and televised events.

In Mauritania, the day was marked by a ceremony in Nouakchott that included distribution of "Guinea Worm Cloth" produced by Faso Fani, and coverage in French and Arabic language media.

In Niger, the Minister of Public Health was joined by the ministers of water, social development, economics, administration, and finance in a ceremony held at the endemic village of Boubon, near Niamey. The minister's speech was widely reported with several other related messages in the national television, radio, and newspapers, as well as interviews, discussions, and skits.

Togo's celebrations were held at the prefectural level in the most affected areas of the country. They included songs, skits, debates, and a football (soccer) match: the "Coupe Ver de Guinee 93".

The main purpose of these national celebrations, which began in 1992 at the initiative of the OCCGE, is to increase social mobilization of the respective populations. This year's celebrations in various countries were also assisted by WHO, UNICEF, Global 2000, U.S. Peace Corps, and numerous private companies and groups. Several countries provided WHO with videotapes of their activities.

CERTIFICATION OF ERADICATION: YEMEN STILL ENDEMIC?



Dr. Philippe Ranque of WHO headquarters and Dr. N. Neouimine of WHO's Regional Office for the Eastern Mediterranean (EMRO) visited the Republic of Yemen from 19 to 30 May 1993 to start the process of certification of dracunculiasis eradication in that country. During their visit, the WHO team interviewed residents and medical staff who described a few apparent cases of dracunculiasis having occurred in three governorates of the country (Hajjah, Sana'a, Al-Beida) as recently as 4 months to 4 years ago. The team saw no active cases themselves. They recommended that a nationwide survey should be undertaken as soon as possible, and appropriate action taken in follow-up to the results. This consultation was supported by funding provided to WHO by the OPEC Fund for International Development and by EMRO.

The WHO Collaborating Center for Research, Training, and Eradication of Dracunculiasis at CDC has recently received credible reports of cases of dracunculiasis among displaced populations in eastern Liberia and in northeastern Zaire.

IN BRIEF

Central African Republic: Three cases of dracunculiasis have been reported in Sudanese refugees residing at Mboki.

Chad: 2193 villages in 2 prefectures were surveyed in March, in the first phase of the

national case search. A total of 156 cases of dracunculiasis were seen by the surveyors in 37 endemic villages of Mayo Kebbi Prefecture. No cases were found in Chari Baguirmi Prefecture. [These data represent point prevalence, not annual incidence.]

Ethiopia: A total of 303 cases of dracunculiasis were identified in 64 endemic villages in 1992: 57 of the endemic villages are in Gambella Province; 7 are in South Omo Province.

Kenya: A national workshop to consider plans for surveillance of dracunculiasis and other diseases is scheduled to be held July 25-29.

Niger: Training of trainers to instruct village-based health workers of the dracunculiasis eradication program began at the national level on April 21-23. In May, the training was extended to Mirriah and Tera, the two most highly endemic arrondissements in Zinder and Tillaberi Departments, respectively. The eradication program also helped to instruct 27 U.S. Peace Corps Volunteers regarding actions they could take in support of the program. Seven of the volunteers will be assigned to the Department of Zinder, the most heavily affected area of the country.

Sudan: The search of two more states has been completed. The full report of this search is not yet available, but cases of dracunculiasis were found in Eastern State and none in Northern State. Interventions were to begin in June in the most highly endemic area of Central State. Only Equatoria and Upper Nile States remain to be searched.

PRESIDENT CARTER TO VISIT ENDEMIC EAST AFRICA

The chairman of Global 2000, former U.S. President Jimmy Carter, plans to visit the four endemic East African countries of Ethiopia, Kenya, Sudan, and Uganda in August 1993. The main purpose of these visits, which are similar to visits he made in September 1992 to five endemic francophone countries in West Africa, is to help promote support for the dracunculiasis eradication programs in East Africa. The East African countries are the last of the endemic regions to mobilize to eradicate dracunculiasis by the end of 1995. Before he arrives in East Africa, Mr. Carter will also visit Benin and Togo, primarily in connection with other projects of the Carter Center. Since March 1993, Global 2000 has also made small grants to Cote d'Ivoire, Mauritania, Sudan, and Togo in order to accelerate extension of interventions to remaining endemic areas of those countries.

RATES OF DECLINE OF DRACUNCULIASIS

Experience thus far (Cameroon, Ghana, Nigeria, and Pakistan) indicates that the number of cases can be reduced by 30-80% annually (Table 2), by aggressive campaigns to enhance public awareness about dracunculiasis and how to prevent it, the promotion and provision of cloth filters, and/or safe sources of drinking water and other village-based interventions. Since 1988, eradication efforts in Cameroon, Ghana, India, Nigeria, and Pakistan have prevented a total of at least 642,718 cases of Guinea worm disease.

Table 2 ANNUAL RATES OF DECLINE OF CASES OF DRACUNCULIASIS
ACHIEVED BY ERADICATION PROGRAMS

COUNTRY PROGRAM	YEAR	NUMBER OF CASES REPORTED	NUMBER OF CASES PREVENTED	RATE OF DECLINE OF CASES RELATIVE TO PREVIOUS YEAR (%)
INDIA	1985	30,950	0	0
	1986	23,070	7,888	25.5
	1987	17,031	6,039	26.2
	1988	12,023	5,008	29.4
	1989	7,881	4,142	34.5
	1990	4,798	3,083	39.1
	1991	2,185	2,613	54.5
	1992	1,081	1,104	50.5
NIGERIA	1988	653,492	0	0
	1989	640,008	13,484	2.1
	1990	394,082	245,926	38.4
	1991	281,937	112,145	28.5
	1992	183,937	98,000	34.8
GHANA	1989	179,556	0	0
	1990	123,793	55,763	31.0
	1991	66,697	57,096	46.1
	1992*	33,464	33,233	49.8
CAMEROON	1989	871	0	0
	1990*	742	129	14.8
	1991	393	349	47.0
	1992	127	266	67.7
PAKISTAN	1987	2,400	0	0
	1988	1,110	1,290	53.7
	1989	534	576	52.0
	1990*	160	374	70.0
	1991	106	54	33.8
	1992	23	83	78.3

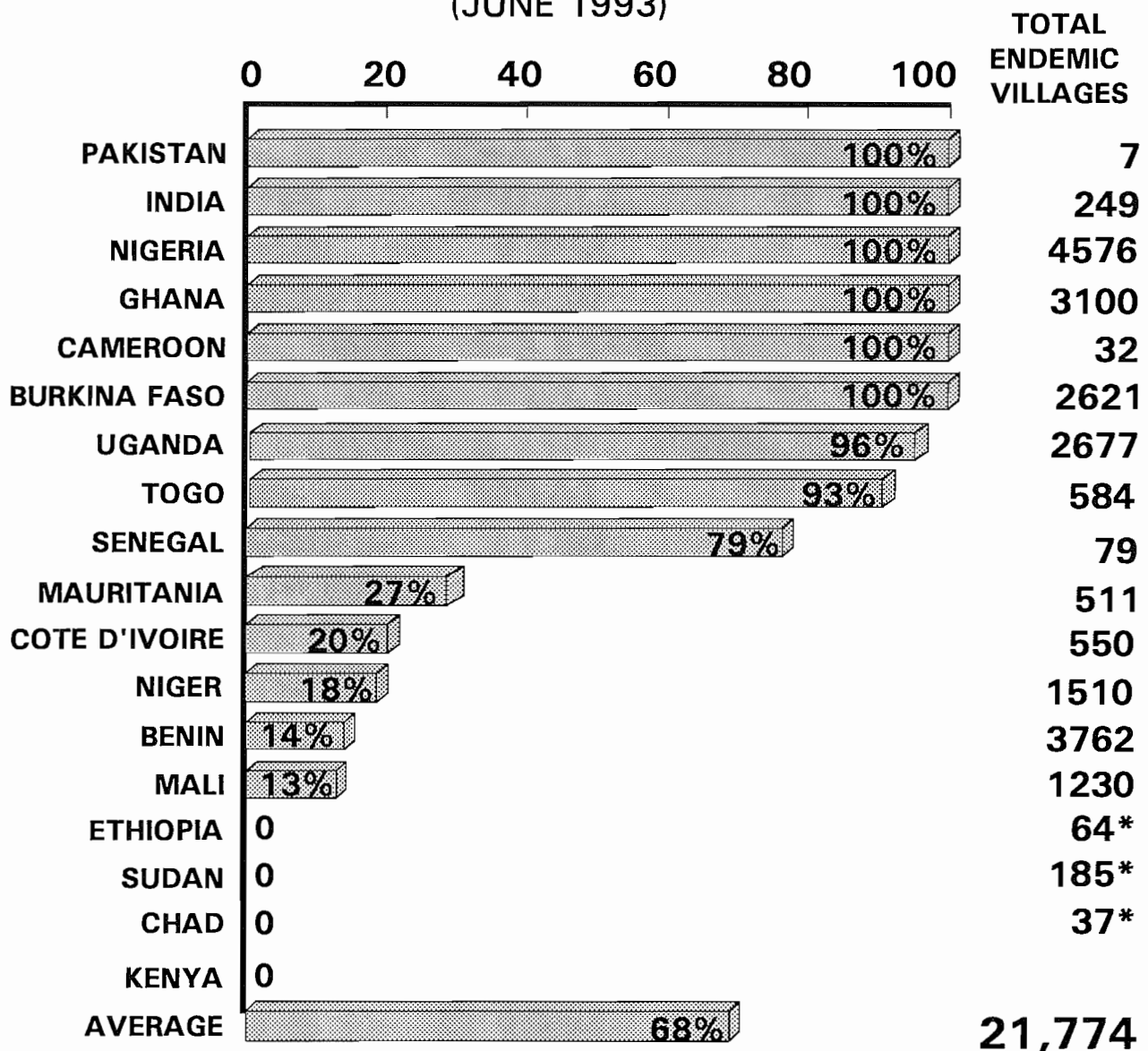
* YEAR CASE-CONTAINMENT STRATEGY IMPLEMENTED

INTERVENTIONS IN ENDEMIC VILLAGES

Currently, dracunculiasis is known to be endemic in 21,774 villages in Africa (16 countries), India, and Pakistan. Figure 5 shows the proportion of endemic villages in which 1 or more interventions have been implemented (trained village-based health worker, health education, distribution of cloth filters, or recently provided with new or rehabilitated safe water supply).

Figure 5

**PERCENTAGE OF VILLAGES WITH ENDEMIC DRACUNCULIASIS
HAVING ONE OR MORE CONTROL INTERVENTIONS
(JUNE 1993)**



* Provisional

ABATE TRAINING PLANNED IN UGANDA, NIGER

Courses are being planned to train trainers who can then prepare other workers in Uganda and Niger to use Abate (temephos) for vector control in Guinea Worm Eradication Programs. One or two appropriate persons from Ethiopia and Sudan will be invited to join the course in Uganda in late August, and one or two persons from Cote d'Ivoire and Togo are expected to join the course in Niger, which is scheduled for September 7-9. Support for this training is being provided by Global 2000.

TENTATIVE SCHEDULE FOR 1993 PROGRAM REVIEWS

Representatives of the four co-sponsoring agencies (WHO, UNICEF, the WHO Collaborating Center for Research, Training, and Eradication of Dracunculiasis at CDC, and Global 2000) have suggested the following tentative schedule for Program Reviews to be held in 1993:

Anglophone Review	Week of September 20, in Addis Ababa: Ethiopia, Ghana, Kenya, Nigeria, Sudan, Uganda
Francophone Review #1	Week of October 11, in Lome or Abidjan: Benin, Burkina Faso, Cameroon, Cote d'Ivoire, Togo
Francophone Review #2	Week of November 8, in N'Djamena: Chad, Mali, Mauritania, Niger, Senegal

A suggested common format for preparing and reporting the status of dracunculiasis and of the eradication program will be sent to the National Program Coordinators in each country by the end of July.



RECENT PUBLICATIONS

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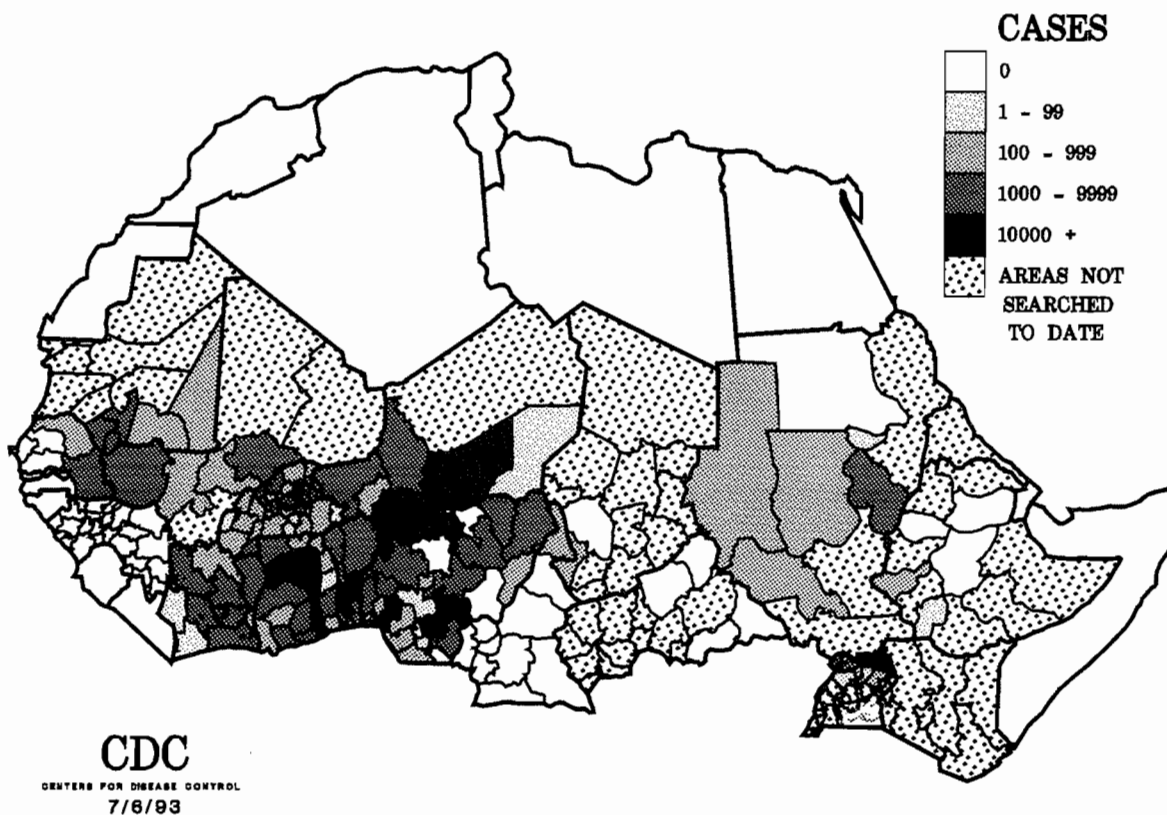
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NUMBER OF REPORTED CASES OF DRACUNCULIASIS IN AFRICA 1990 - 1993



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