



Memorandum

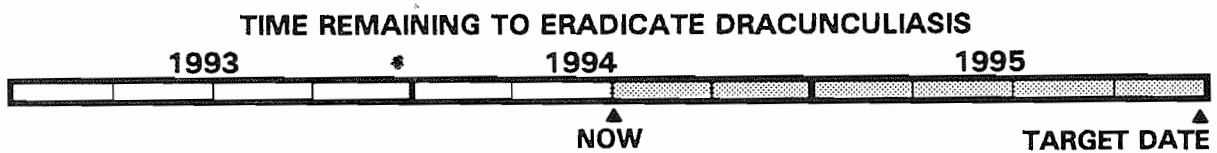
Date June 30, 1994



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

Subject GUINEA WORM WRAP-UP #44

To Addressees



NORWAY CONTRIBUTES \$1.4 MILLION TO GLOBAL 2000 AND UNICEF

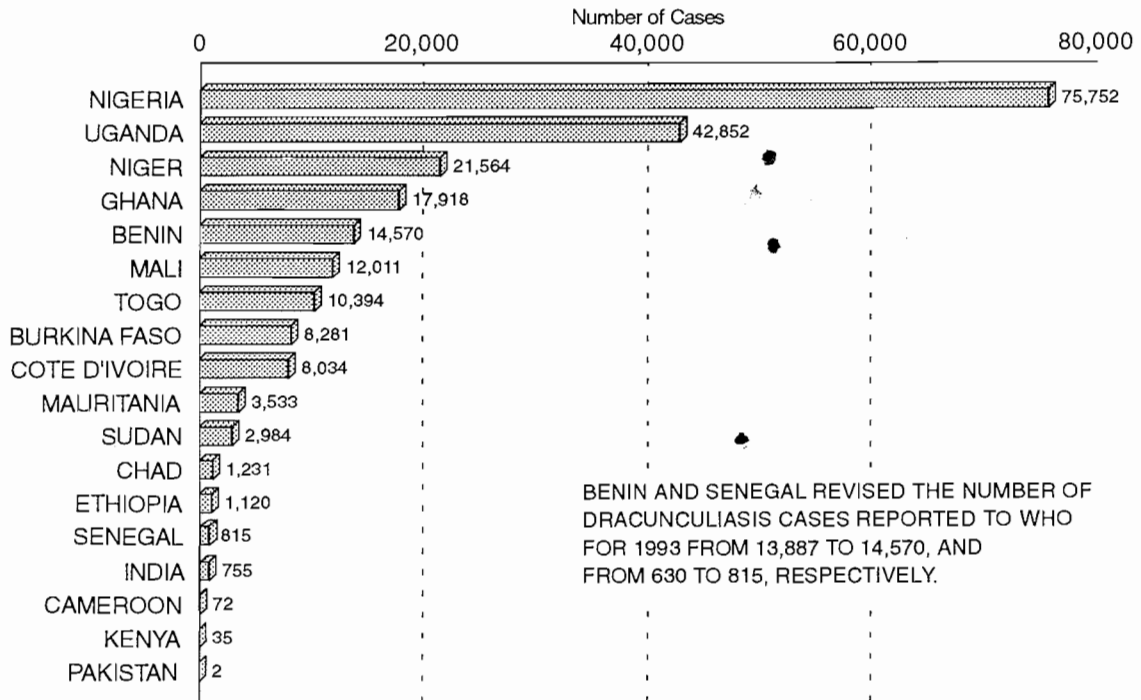


At a ceremony held in Oslo on May 18 as part of a seminar on dracunculiasis eradication, the Norwegian Minister of Development Cooperation, Mrs. Kari Nordheim-Larsen, announced that the government of Norway was donating 10 million Norwegian kroner (US\$1.4 million) to the eradication effort. Half of the new funding was presented at the ceremony to Global 2000 Chairman former U.S. President Jimmy Carter; the other half was provided later to UNICEF. Mrs. Nordheim-Larsen observed that "This would be the second time in the history of humankind that a disease is completely eradicated. It is now time to secure that momentous achievement. Norway contributed towards the eradication of smallpox. Now we support the efforts against Guinea worm."

President Carter thanked the Government of Norway for the flexibility and timeliness of the donation. "We are deeply grateful to the people of Norway who have habitually supported this kind of project leading to a better life for people", he said. The ceremony and seminar held at Oslo's Concert Hall were chaired by Dr. Anders Seim of Health and Development International, who worked to secure the donation by the Norwegian government. The main speaker at the seminar, which included a showing of the film "The Fiery Serpent" and which was attended by representatives of European governments including Denmark, Finland, Germany, Italy, and the United Kingdom, as well as CARE, UNICEF, and Lions International, was Global 2000 senior consultant Dr. Donald Hopkins. The funds provided to Global 2000 will be used to support case containment, vector control, and other priority activities during the final stages of the campaign. The funds provided to UNICEF are earmarked for the eradication programs in Burkina Faso, Niger, and Uganda.

Figure 1 shows the number of dracunculiasis cases reported to WHO by each affected country during 1993 (see Guinea Worm Wrap-Up #43, p. 2).

DISTRIBUTION BY COUNTRY OF 221,923 CASES OF DRACUNCULIASIS REPORTED TO THE WORLD HEALTH ORGANIZATION IN 1993



MONTHLY REPORTING OF CASES AND OF NEWLY ENDEMIC VILLAGES: A PRIORITY FOR 1994

The numbers of cases reported monthly so far this year are compared graphically in Figure 2 to the data from 1993 for six countries which had reasonably complete monthly reporting last year. The average reductions reported so far in 1994 as compared to the same period of 1993 are 83% in Uganda (4 months), 73% in India (4 months), 65% in Togo (5 months), 63% in Ghana (5 months), 60% in Nigeria (4 months), and 32% in Burkina Faso (5 months). Except for Ghana, where reporting rates are recovering from the civil strife which disrupted reporting in the Northern Region beginning in January 1994, rates of reporting from endemic villages are presumably as good or better in 1994 than they were in 1993. In Cameroon, which is not represented in Figure 2, 11 cases of dracunculiasis were reported up to the first part of June 1994, whereas the same number of cases were reported in that country as of the end of June in 1993. One of the key recommendation of the Fifth African Regional Conference was that countries should begin reporting cases of dracunculiasis to WHO, monthly. In collaboration with ITECH in Ouagadougou and in Nairobi, and Global 2000, the WHO Collaborating Center at CDC is now compiling and circulating monthly summaries of the numbers of cases of dracunculiasis, and of newly endemic villages, reported monthly by most endemic countries (Table 1 and Table 2). Enhancing the sensitivity of surveillance and the use of surveillance information to effectively target control interventions is another critical step in the countries' intensification of their eradication programs.

Figure 2 NUMBER OF CASES OF DRACUNCULIASIS REPORTED IN NIGERIA, UGANDA, GHANA, BURKINA FASO, TOGO, AND INDIA: 1993 - 1994

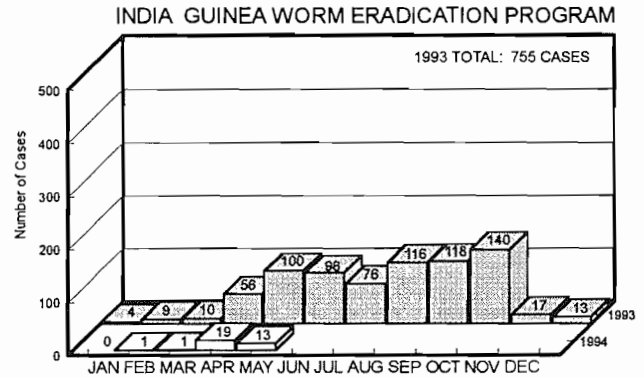
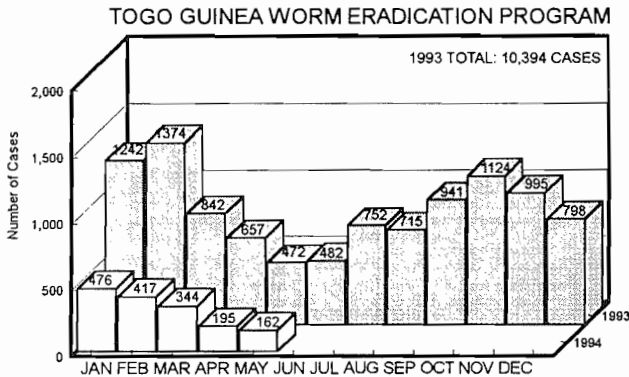
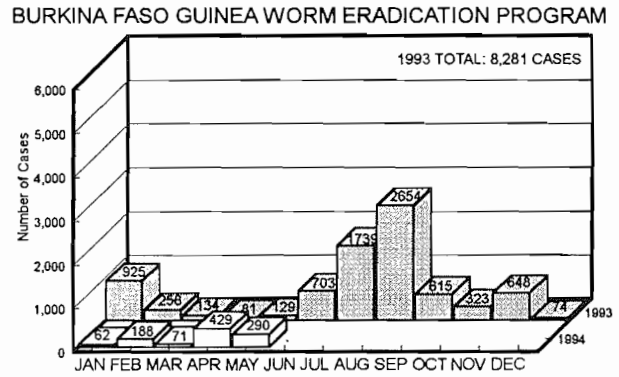
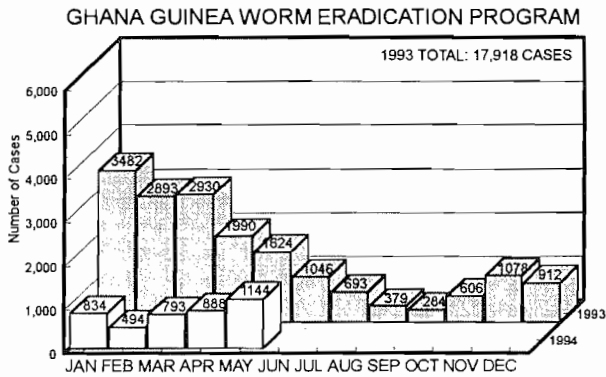
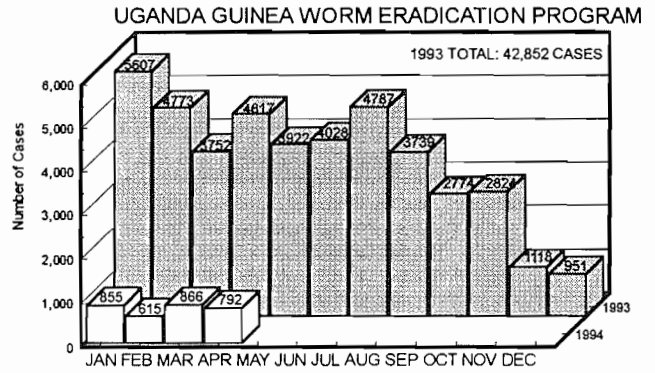
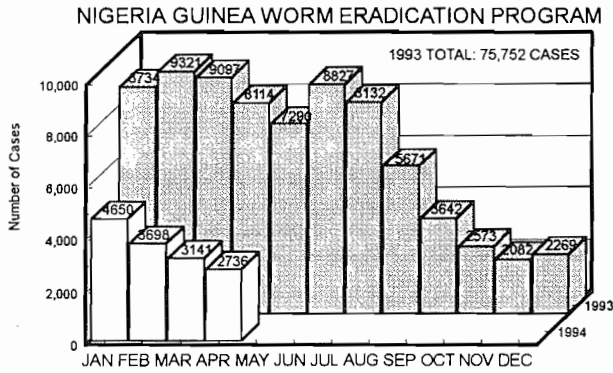


Table 1

MONTHLY REPORTING OF CASES OF DRACUNCULIASIS IN 1994
(COUNTRIES ARRANGED IN DESCENDING ORDER OF INCIDENCE DURING 1993)

COUNTRY	ANNUAL INCIDENCE IN 1993	NUMBER OF CASES REPORTED DURING 1994												YEAR TO DATE TOTAL*				
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC					
NIGERIA	75,752	4650	3698	3141	2736													14225
UGANDA	42,852	855	610	866	790													3121
NIGER	21,564				263													263
GHANA	17,918	834	494	793	888	1144												4153
BENIN	16,334	502	371	191	138													1202
MALI	12,011	101	122	228	148	504												1103
TOGO	10,349	476	417	344	195	162												1594
BURKINA FASO	8,281	62	188	71	429	290												1040
COTE D'IVOIRE	8,034	543	582	452	770	341												2688
MAURITANIA	3,533	0	0															0
SUDAN	2,984		136		169													305
CHAD	1,231	59	2	0	0													61
ETHIOPIA	1,120*	1	24															25
SENEGAL	815	0	0	0	0	0												0
INDIA	755	0	1	1	19	13												34
CAMEROON	72	0	0	0	1	5	5											11
KENYA	35*						13											13
PAKISTAN	2	0	0	0	0	0												0
TOTAL*	223,642	8083	6645	6087	6546	2459	18	0	0	0	0	0	0	0	0	0	0	29838

* NATIONAL CASE SEARCH UNDERWAY
• PROVISIONAL

Table 2

MONTHLY REPORTING OF NEW VILLAGES WITH ENDEMIC DRACUNCULIASIS: 1994

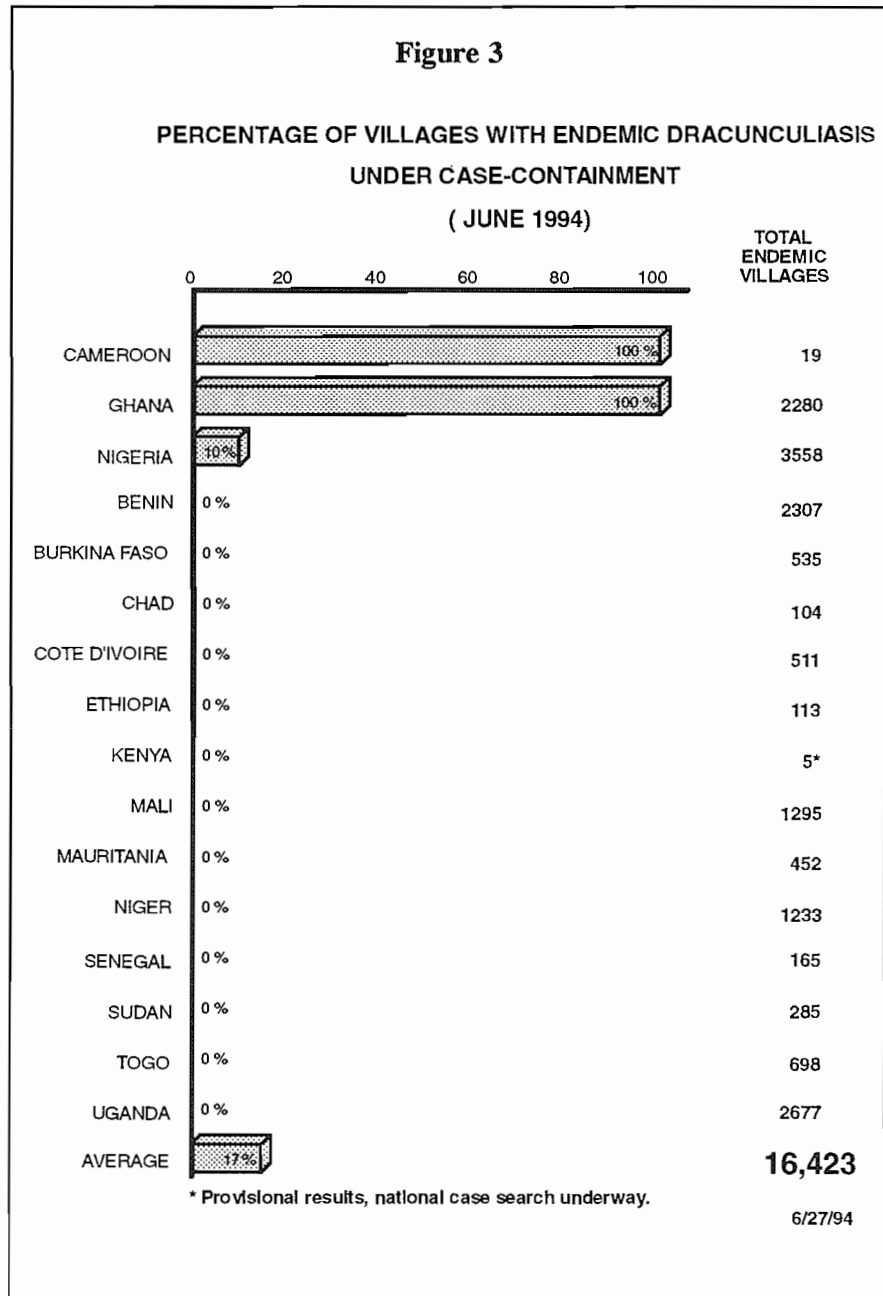
COUNTRY	NUMBER OF ENDEMIC VILLAGES 1993	NEW ENDEMIC VILLAGES REPORTED DURING 1994												YEAR TO DATE TOTAL*			
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC				
NIGERIA	3 558	121	49	20	163												353
UGANDA	2 677																0
NIGER	1 233																0
GHANA	2 280	9	16	35	46	45											151
BENIN	2 327																0
MALI	1 295	0	0	0	0	3											3
TOGO	698	3	0	0	1	1											5
BURKINA FASO	535																0
COTE D'IVOIRE	511	0	0	11	11	10											32
MAURITANIA	452	0	0	30													30
SUDAN	285																0
INDIA	186	0	0	0	0	0											0
SENEGAL	165																0
ETHIOPIA	113*																0
CHAD	106	0	0	0	0												0
CAMEROON	19	0	0	0	0	1	1	1									2
KENYA	5*							10									10
PAKISTAN	1	0	0	0	0	0		0									0
TOTAL*	16 446	133	65	96	221	60	11	0	0	0	0	0	0	0	0	0	586

* NATIONAL CASE SEARCH UNDERWAY

* PROVISIONAL

CASE CONTAINMENT: A PRIORITY FOR 1994

As emphasized before (see Guinea Worm Wrap-Up #42, pages 11-15), case containment should be a major priority for every endemic country during 1994. This is because in order to stop transmission of all cases of dracunculiasis in 1995 (no cases in 1996), programs must fully contain all cases that year, beginning January 1, 1995. In order to do so, they must extend case containment to all remaining endemic villages by the end of this year, December 31, 1994. And since only by actually implementing case containment can health workers at all levels improve their performance to the high standard required, the sooner each country starts implementing the strategy in 1994, the better. Moreover, programs should remember the critical need to mobilize villagers to support and participate in case containment in their own village. As can be seen in Figure 3, much remains to be done quickly on this in 1994. In-country training for case containment is already underway in Mali, Niger, and Uganda.

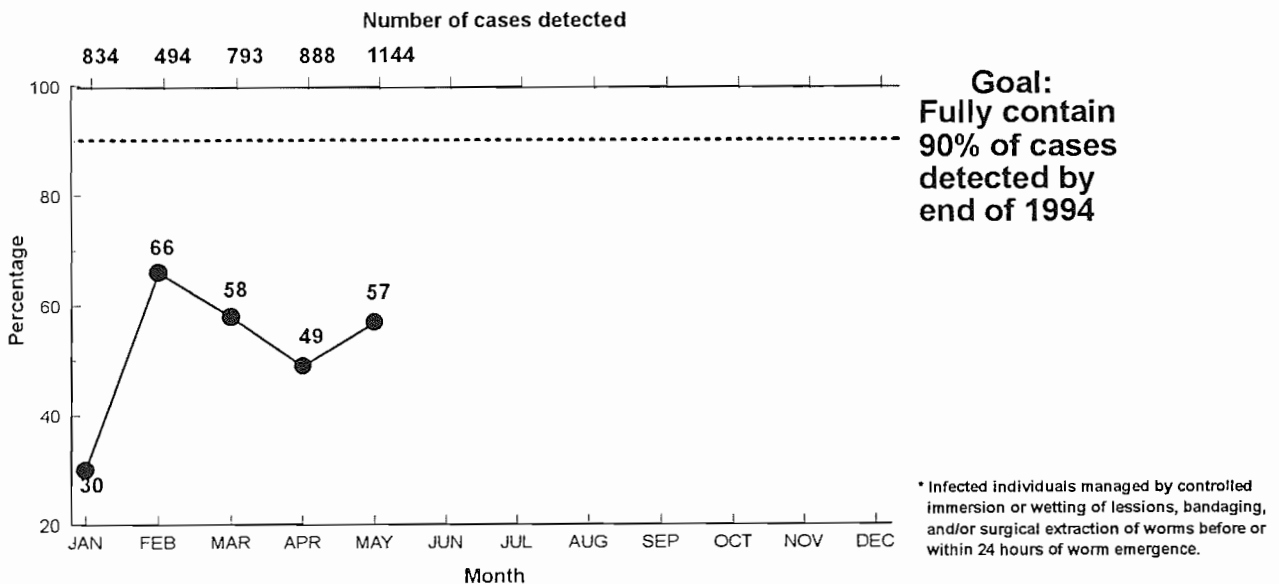


A case is considered contained when the patient cannot contaminate a source of drinking water, and ongoing transmission is thereby prevented. Full containment of a case is achieved if the worm was extracted prior to emergence; or if the worm was extracted or subjected to controlled immersion and/or occlusive bandaging from the beginning of its emergence until it was completely expelled; or if all contaminated sources of drinking water were treated with appropriate amounts of Abate within 7 days of emergence of the worm. The case should also have been verified as contained by a

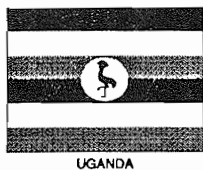
supervisor from the zonal or district level within 7 days. A village is considered as under case containment if the village-based health worker and his/her supervisor have received training in case containment, if appropriate interventions are being employed promptly, and if case containment forms are being used to record and track all cases, individually (see Guinea Worm Wrap-Up #42, pp. 11-15 for examples of case containment forms). Essentially, all endemic villages in Ghana are now considered under case containment, and the proportions of cases contained each month so far in 1994 are shown in Figure 4. The latest national surveillance summary for Ghana, for May, is reproduced in Table 3 (see page 8).

Figure 4

Ghana Guinea Worm Eradication Program
Percentage of cases detected during 1994 that were fully contained*



VICE PRESIDENT OF UGANDA OPENS NATIONAL CONFERENCE



The Vice President of Uganda, Dr. Samson Kisekka, represented the country's president at the opening of the Second National Conference on Guinea Worm Eradication held at the Uganda International Conference Center in Kampala on June 13-14. The opening of the conference, which was attended by representatives from each of the districts of the country where the disease is endemic, also coincided with the observance of Uganda's first National Guinea Worm Day. On

the same day the President of Uganda, Honorable Yoweri Museveni, attended the annual meeting of the Organization of African Unity in Tunis, where he and Mr. James Grant, executive director of UNICEF, discussed the possibility of a "summit" meeting of heads of state of the four endemic countries of East Africa on the issue of dracunculiasis eradication. Significant external support for the conference and national day in Uganda was provided by UNICEF and Global 2000.

Table 3

GHANA GUINEA WORM ERADICATION PROGRAMME
SURVEILLANCE SUMMARY

MONTH OF REPORT: MAY '94

REGION	VILLAGES					CASES						VECTOR CONTROL			
	# ENDEMIC /	# ENDEMIC REPORTED	% ENDEMIC REPORTED	# INFECTED THIS MONTH	# DIFFERENT VILLAGES INFECTED THIS YEAR	NEW GWD CASES			# RECEIVED CONTROLLED IMMERSION/ BANDAGING	# EXTRACTED PRE- EMERGENT	TOTAL # EXTRACTED	# CONTAINED ***	# ENDEMIC VILLAGES TREATED THIS MONTH	# WATER SOURCES TREATABLE THIS MONTH	# WATER SOURCES TREATED THIS MONTH
						INDIGENOUS	IMPORTED @*@	TOTAL							
WESTERN	13/3	16	100	2	6	16	2	18	7	4	9	18	5	10	10
CENTRAL	79/10	83	93	14	42	60	0	60	48	9	9	44	89/45	237	237
EASTERN	61/22	102	99	7	46	36	2	38	6	5	21	11	6	10	10
GT. ACCRA	29/2	31	100	0	2	0	0	0	0	0	0	0	31/49	66	86
VOLTA	315/18	326	97	18	90	61	2	63	10	7	17	27	5	7	7
ASHANTI	81/2	83	100	3	29	3	2	5	5	0	0	5	2	5	3
BRONG AHAFO	158	158	100	7	41	11	0	11	11	0	0	11	11	11	11
NORTHERN	1488/92	1085	69	255	534	900	0	900	685	94	94	484	85	126	126
UPPER WEST	36/2	33	100	3	8	45	0	45	38	7	7	45	5	10	10
UPPER EAST	0	0	0	4	29	0	4	4	4	0	0	4	0	0	0
TOTAL	2280/151	1922	79	313	327	1132	12	1144	815	126	157	649	239/94	480	480

/* PREVIOUSLY NON-ENDEMIC VILLAGES.

** / PREVIOUSLY ENDEMIC VILLAGES.

@*@ WHEN SOURCE OF INFECTION IS FROM A DIFFERENT REGION OR OUTSIDE GHANA.

*** A CASE IS COUNTED AS CONTAINED ONLY IF:

(1) THE WORM WAS EXTRACTED PRIOR TO EMERGENCE OR,

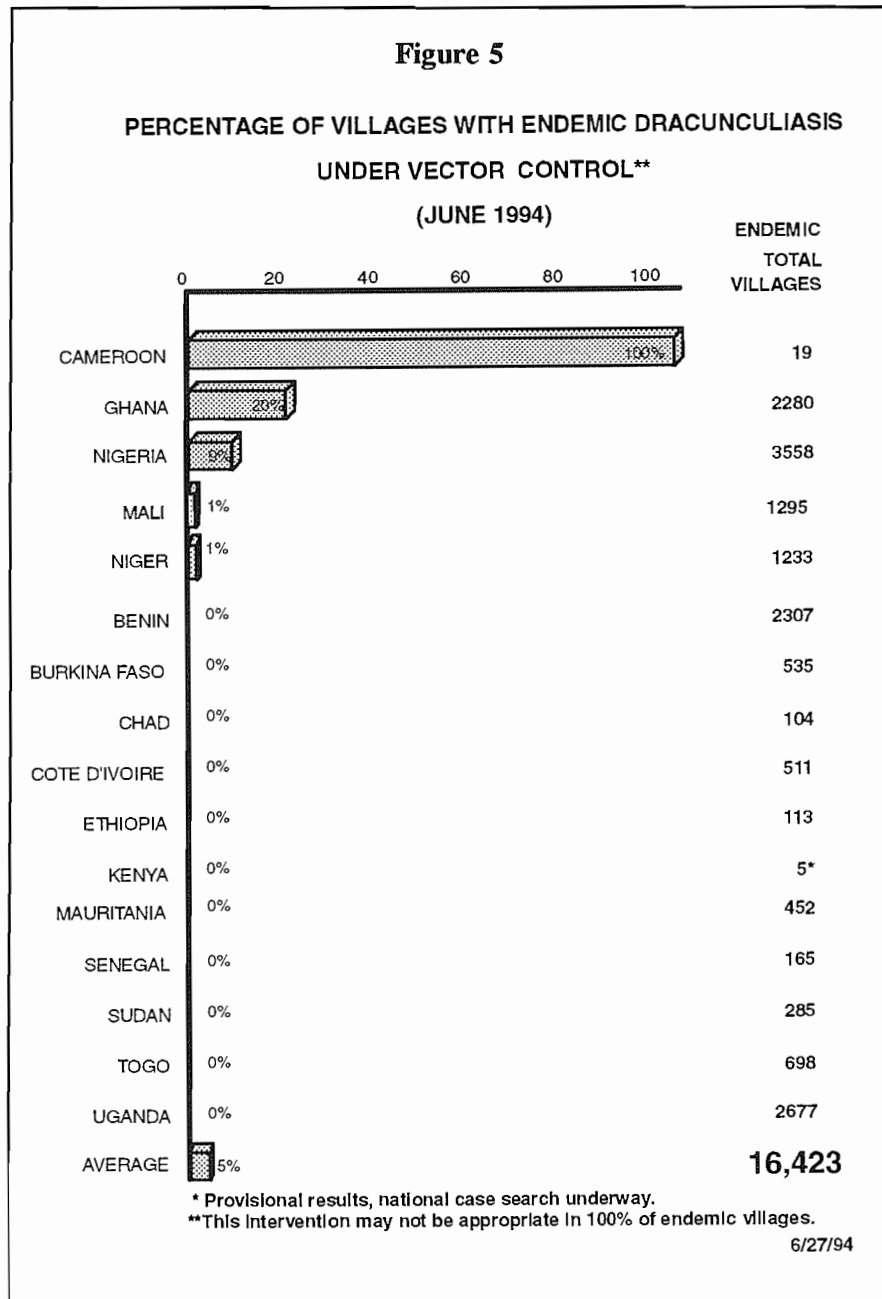
(2) THE WORM HAS EITHER BEEN EXTRACTED OR RECEIVED CONTROLLED IMMERSION AND/OR OCCLUSIVE BANDAGING UNTIL COMPLETELY EXPELLED AND

a) IT HAS BEEN VERIFIED THAT THE CASE HAS NOT CONTAMINATED A DRINKING WATER SOURCE; AND

b) THE CASE HAS BEEN VERIFIED WITHIN 7 DAYS AS CONTAINED BY A SUPERVISOR FROM THE ZONAL OR DISTRICT LEVEL OR BY A WORM EXTRACTOR.

VECTOR CONTROL: A PRIORITY FOR 1994

Use of Abate (temephos) to prevent transmission by controlling the copepod vectors of dracunculiasis is another high priority for 1994. It is needed both to help raise the rates of reduction of the disease in appropriate moderate to high endemic areas, which is increasingly important now that only 18 months remain before the target date for eradication (see Table 4, page 10), as well as for complete implementation of case containment in the lesser endemic areas. The percentage of endemic villages where Abate is used should not approach 100% until a country is nearing eradication, but all endemic African countries, except Cameroon and Ghana, still have much to do in bringing this intervention to bear in appropriate endemic areas (see Figure 5). The delay in implementing this intervention is now especially serious in the countries of the Sahel and most of East Africa, where this year's peak transmission season has just begun.



Training courses for the use of Abate were held in the following places: in Sennar, Sudan on May 7-11; in Benin on May 5-7; and for the northwest zone of Nigeria on May 24-27. At the present time, stocks of Abate are available in all the endemic countries except in Benin, Burkina Faso, Chad, Mauritania, and Sudan.

Table 4 IMPACT OF SINGLE AND MULTIPLE INTERVENTIONS ON DRACUNCULIASIS INCIDENCE IN ONE YEAR

INTERVENTIONS	NUMBER OF		REDUCTION OF CASES AFTER ONE YEAR	COUNTRY ^{REFERENCE}
	ENDEMIC VILLAGES	CASES		
WATER SUPPLY	279	14,200	77%	GHANA, NANUMBA DISTRICT ¹
VECTOR CONTROL (ABATE)	2	147	63%	BURKINA FASO ⁵
	1	46	80%	GHANA ⁷
	8	82	38%	CAMEROON ⁴
	1	2691	39%	NIGERIA ⁸
VECTOR CONTROL + HEALTH EDUCATION (ED.)	1	2492	63%	NIGERIA ⁸
	1	202	43%	NIGERIA ²
HEALTH EDUCATION + FILTERS	3	591	83%	BURKINA FASO ³
	4	104	31%	BURKINA FASO ⁵
	1	58	67%	INDIA ⁶
VECTOR CONTROL + HEALTH ED. + FILTERS	4	139	27%	BURKINA FASO ⁵
	1	106	94%	INDIA ⁶
VECTOR CONTROL + HEALTH ED. + FILTERS + CASE-CONTAINMENT	35	106	78%	PAKISTAN ⁹
	2	133	69%	CAMEROON ⁴
WATER SUPPLY + VECTOR CONTROL + HEALTH ED + FILTERS + CASE-CONTAINMENT	2	416	78%	CAMEROON ⁴
	588	963	80%	INDIA ¹⁰

1. Bugry, S.Z. 1991. Report from the Ghana Guinea Worm Eradication Program on the impact of 159 wells provided by Japan's International Cooperation Agency (JICA) on dracunculiasis in Nanumba District, Northern Region, Ghana.
2. Edungbola, L.D., and Watts, S.J. 1990. The elimination of dracunculiasis in Ighon, Oyo State, Nigeria: the success of self-help activities. *J. Trop. Med. & Hyg.*, 93:1-6.
3. Gbary, A.R., Guiguemde, T.R., and Ouedraogo, J.B. 1987. La dracunculose, un fleu eradique dans trois villages du Burkina Faso par l'education sanitaire. *Bull. Soc. Path. Ex.*, 80:390-395.
4. Greer, G., Dama, M., Graham, S., Migliani, R., Alamy, M., and Sam-Abbenyi, A. 1994. Cameroon: an African model for final stages of Guinea worm eradication. *Am. J. Trop. Med. Hyg.*, 50(4): 393-400.
5. Guiguemde, T.R., Gbary, A.R., and Ouedraogo, J.B. 1991. Controle de la dracunculose par trois techniques au sud-ouest du Burkina Faso efficacite comparee de techniques. *Medecine Tropicale*, Oct.-Dec., 51(4):445-50.
6. Kaul, S.M., Sharma, R.S., and Verghese, T. 1992. Monitoring the efficacy of temephos applications and use of fine nylon strainers by examination of drinking water containers in Guineaworm endemic villages. *J. Com. Dis. (Delhi)*, 24: 159-163.
7. Lyons, G.R. 1973. Control of Guineaworm with Abate: a trial in a village on northwest Ghana. *Bull. WHO.* 49:215-216.
8. Nwaorgu, O.C. 1991. The effectiveness of combined control measures on the prevalence of Guinea worm disease in Anambra State, Nigeria. *J. Helminth.*, 65:226-231.
9. Azam, M. 1993. Report from the Pakistan Guinea Worm Eradication Program for the period 1991-1992.
10. National Institute of Communicable Diseases, 1994. Decline of cases in Udaipur, Dungarpur and Banswara Districts, Rajasthan State: 1992-1993. Report and Recommendations of the XVI Task Force Meeting.

EIGHT FRANCOPHONE COUNTRIES MARK NATIONAL GUINEA WORM DAY

Eight of the ten endemic francophone countries celebrated National Guinea Worm Eradication Day in April this year. Summaries of the activities follow:

Benin: A contest of eight musical groups from different areas rendering songs about dracunculiasis and its prevention was held at Dassa-Zoume, in Zou Department on April 22. Invited participants included the Minister of Health; of Energy, Mines and Water; and of Work, Employment and Social Affairs; the resident representatives of UNICEF and WHO; and persons responsible for the Guinea worm eradication activities in Atlantique and Mono Departments. The National Program Coordinator, Mr. Julien Dosso-Yovo, also participated. The events were described in the written news media, radio, and television.

Burkina Faso: After the intensive coverage generated by the convening of the Fifth African Regional Conference on Dracunculiasis Eradication in Ouagadougou from 29 to 31 March, the main celebrations of National Guinea Worm Eradication Day were held in the most highly affected provinces, such as Bam, Yatenga, Comoe, and Poni, on 30 April. The celebrations included broadcasts in local languages. The National Program Coordinator Dr. Roger Hien, also participated in a conference on dracunculiasis which was held in Bobo-Dioulasso, with the support of UNICEF, as a part of the 7th National Culture Week during the same period.

Côte d'Ivoire: The major celebration here was held on April 23 in the village of Togbasso and the town of Mankono in Seguela sub-prefecture, North-East Region. A film on Guinea worm was shown in the village on April 22, followed by a discussion. Speeches were given in Mankono on April 23 by the minister of health, the resident representatives of WHO and UNICEF, the medecin-chef of Seguela, the head of U.S. Peace Corps in Côte d'Ivoire, and the National Program Coordinator, Dr. Henri Boualou. Both national television stations were present, and an hour-long radio show was taped to be broadcast on May 3. The minister of health then spoke again in the villages of Togbasso and Bassapla. [A newspaper account of the visit to the latter village described how one man suffering from Guinea worm nearly perished because he couldn't walk or run when his village caught on fire one recent night. He was rescued by several women who heard his cries for help.]

Mali: The intensive activities of the Malian program peaked on April 30, and featured radio and television interviews and a press conference by the President of the Intersectoral Committee, former head of state General A.T. Toure, and broadcasting of a round table discussion between the National Program Coordinator, Dr. Issa Degoga, and the technical advisor to the president of the intersectoral committee, Dr. Dramane Sangare. Radio broadcasts were in French, Bambara, and several other local languages. At least 15 articles were published by four major newspapers. A comedy sketch by one of Mali's best known comedians was broadcast several times. Other activities included placement of four banners over major thoroughfares in Bamako, distribution of 2600 stickers, and various local activities, such as visits to endemic villages by local political and medical authorities, and soccer matches in every affected region and cercle.

Mauritania: Activities were limited because of inadequate funding, but the April 30 national day was marked by a two hour-long radio broadcast in which the National Program Coordinator, Dr. Sidi Mohamed, responded to questions telephoned in by listeners, and a similar televised

interactive program, which included interviews with persons living in an endemic area. About 100 T-shirts were distributed in Nouakchott, as well as 300 car bumper stickers; the latter with the support of WHO.

Niger: This year's highly successful celebrations on April 30 included a theme, "Guinea Worm Eradication: Women Must Act", and featured the highly-publicized participation of the wives of the head of state (Mme. Mahamane Ousmane Nana Mariama), of the prime minister (Mme. Mahamadou Issoufou Aichatou), and of the president of the national assembly (Mme. Djermaakoye Moumouni Fati). Television coverage included footage of the wife of the head of state filtering water during a visit by the three "first ladies" to an endemic village. Two films in Hausa and Djerma were made in two highly endemic villages with the assistance of UNICEF. The films were broadcast for the national day, and used in special health education tours of the most highly endemic villages of Tillaberi Department. Activities in at least two of the regions included special "soirees culturelles", banners, radio messages, and health education programs in endemic villages.

Senegal: Activities at the national level included related radio broadcasts in Wolof and in French, as well as interviews and articles in the three main newspapers, and placement of several banners over major streets in Dakar. In the endemic districts of Bakel, Kedougou, and Matam, a specially-equipped mini-bus was used to project a film on Guinea worm. Radio broadcasts about the disease and its prevention were also broadcast in the three endemic districts, and several special T-shirts were distributed, along with donated filter cloth. The report from the National Program Coordinator, Dr. A.B. Gaye, acknowledges UNICEF's support for the celebrations in his country.

Togo: Some activities were held at village and prefectural levels, but no details were available at the time of this report.

Of the two other endemic francophone countries,

Cameroon celebrates its National Guinea Worm Day at a different time, and

Chad had no special activities conducted this year.

IN BRIEF:

"Relieving people's poverty ought to be handled as though one were rescuing them from fire or saving them from drowning. One cannot hesitate." Chinese emperor (Ming Dynasty) Hongxi, 1424/5 A.D.

Côte d'Ivoire: The National Guinea Worm Eradication Program has begun issuing concise monthly reports of its interventions, other activities, and surveillance results by geographic areas. The numbers of cases and of new endemic villages reported thus far by month in 1994 (provisional for May) are given in Tables 1 and 2. The percentage of endemic villages submitting reports for the first five months of 1994 are: 71.6%, 81%, 79.8%, 77.2%, and 61.7% (provisional), respectively. [These results are noteworthy both because the program has the inform-

ation, and because of the significant progress and completeness of monthly surveillance which they document.] The program plans to begin training of health workers for vector control and for case containment in mid-July. A French agency is assisting in placement of new pumps in several endemic villages of Seguela Region.

Ethiopia: The proportion of 113 endemic villages now covered by at least one trained village-based health worker, health education about dracunculiasis, and cloth filters is 79%. Hydrological assessments of endemic communities are being undertaken by UNICEF/Ethiopia to target those communities for safe water supplies.

India: According to a report from Dr. Ashok Kumar, only 4 districts of India reported cases of dracunculiasis between January and May (provisional) this year: Nagaur, Bikaner, and Jodhpur in Rajasthan State, and Dhar in Madhya Pradesh State. The 9 endemic villages are all previously known to be endemic. Market day surveys have been found to significantly enhance the sensitivity of surveillance for dracunculiasis in the later stages of the program in India (see reference by Kumar et al at the end of this issue).

Kenya: Thirteen cases from 10 endemic villages were reported in June from Turkana District during the ongoing national case search.

Niger: The proportion of 1,156 endemic villages covered by trained village-based health workers is now 79%, all have had some health education about dracunculiasis, 44% have received cloth filters, and 74% have or are targeted to receive safe water supplies. Monthly reporting began in April, with 258 cases reported from 42% of the 129 endemic villages of Tera, the country's second most highly endemic district. Additional support for interventions has been provided by UNICEF, World Bank, France (CFD), Germany (GTZ), and Switzerland.

Nigeria: Sokoto State, one of the three most highly endemic states in the country, reports a reduction of 76% in the number of cases during the first four months of 1994, as compared to the same period of 1993, with an average of 91% of endemic villages reporting monthly. In the same trimester, reporting rates in Enugu State averaged 66%, the rate of reduction over the past year was only 30%, and that state accounted for 41% of all cases reported in the country. Thus Enugu, which as part of the former Anambra State was the first state in the country to establish a State Task Force for Guinea Worm Eradication (in 1986), is now the highest, and may soon become the last, endemic area of Nigeria. Special interventions are being mounted in the most highly endemic Local Government Areas of Enugu with external support provided by UNICEF, Global 2000, USAID, U.S. Peace Corps, and others. Approximately 45% of the 3,558 endemic villages in the country are scheduled to be using vector control by the end of 1994. During a visit to the Local Government Area headquarters of Oka, in Akoko South LGA earlier this year, Global 2000 resident advisor Mr. Mike Street and Global 2000 senior consultant Dr. Donald Hopkins were made honorary chiefs. Hopkins was declared "The Ataiyese of Akoko South", meaning "he who repairs the world", and Mr. Street was made the "Otu Ataiyese of Akoko South", meaning "the right hand man of he who repairs the world". The two new chiefs were presented with insignia appropriate to the surprise honorifics.

Sudan: A new national program coordinator has been appointed, Dr. Munir Abaro, formerly in the epidemiology section of the ministry of health. Following a workshop held at the end of

March, activities assisted by UNICEF's Operation Lifeline Sudan and several NGOs have been ongoing for three months in the southern part of the country. These include continuation of active surveillance for cases; training of regional, district, and village health coordinators; health education; distribution of cloth filters; advocacy amongst local chiefs and elders, church leaders, administrators, NGOs, schools, and women's groups; and mapping of the known endemic areas. Half of the households in one county of Bahr-El-Ghazal appear to have at least one person currently affected by dracunculiasis. No control measures have been implemented in Yirol and Lakes Districts during this transmission season.

CAMEROON/NIGERIA: INTERCOUNTRY NOTIFICATION OF IMPORTED CASES

In April 1994, Cameroon officially informed Nigeria of five persons with dracunculiasis who were diagnosed in Cameroon between August and December 1993 but who were said to have contracted the disease in five different villages of Borno State, Nigeria. The Nigerian Guinea Worm Eradication Program confirmed the following month that all four of the villages which could be identified (of the five villages named) were previously known to be endemic, and that two of the patients concerned were residents in the respective Nigerian village during the period in 1992 when they acquired their infections.

BENIN/TOGO: MEETING ON THE BORDER

The National Program Coordinators, Mr. K. Ignace Amegbo of Togo, and Mr. Julien Dosso-Yovo of Benin, and several other members of their eradication teams, including counterpart health officials of Benin's Zou Department and of the corresponding region in Togo, met in Tcheti, Zou Department on 24 June. The purpose of the meeting was to review the relevant activities of the Guinea Worm Eradication Programs in each country, exchange information regarding surveillance and control, especially in border areas of the two countries, and to coordinate activities.

MEETINGS

- During the World Health Assembly in Geneva in May, representatives of Nigeria, Norway, Pakistan, and United Arab Emirates referred prominently to the Guinea Worm Eradication Program in their addresses to the plenary sessions. Italy, the United States, and a representative of UNICEF discussed the program's progress in Committee A of the Assembly. A special briefing on the status of the GWEP was held on May 11.
- At a regional meeting of all UNICEF Resident Representatives in Africa, held in Abidjan in early June, UNICEF executive director Mr. James Grant stressed the high priority he places on eradicating dracunculiasis by the end of 1995, and urged those present to do all they can to help make that a reality.
- The XXVI Meeting of the Interagency Coordinating Group for Dracunculiasis Eradication will meet at the Centers for Disease Control and Prevention in Atlanta on July 20.

- The next UNICEF TST meeting will be held September 14-17, in Nairobi, Kenya. The main topic for discussion will be case containment.

PROGRAM REVIEWS

The schedule for 1994 Program Reviews is as follows:

- September 19-23; Nairobi, Kenya: Ethiopia, Ghana, Kenya, Nigeria, Sudan, and Uganda.
- October 10-14; N'Djamena, Chad: Benin, Cameroon, Chad, Niger, and Togo.
- November 14-18; Dakar, Senegal: Burkina Faso, Côte d'Ivoire, Mali, Mauritania, and Senegal.

TRANSITIONS

Mr. P. Craig Withers Jr., currently the associate director for operations at Global 2000's headquarters since 1991, has been nominated as Global 2000's representative at the Interagency Technical Assistance Team for francophone Africa (ITECH) in Ouagadougou, as of September this year. Mr. Withers was previously the first Global 2000 resident advisor to the Nigerian Guinea Worm Eradication Program from 1988 through 1990. Before joining Global 2000, he worked for 10 years in several public health positions at the Centers for Disease Control and Prevention (CDC). This proposed appointment is pending concurrence of the Government of Burkina Faso.

Mr. Raymond Stewart, currently the associate Peace Corps director in Chad, will become director of the Peace Corps program in Benin in September. In Chad, Mr. Stewart initiated efforts to resuscitate the national search for cases, and provided extensive support to the national program coordinator.

RECENT PUBLICATIONS



CDC, 1994. Update: dracunculiasis eradication - Ghana and Nigeria, 1993. *MMWR*, 43:293-295.

Edungbola LD, Parakoyi BD, Kayode OO, Bello AB, 1994. A study to ascertain the acceptance of Abate (temephos) for the treatment of community drinking ponds in the Nigerian Guinea Worm Eradication Programme. *Trop J Health Sciences*, 1:49-54.

Greer G, Dama M, Graham S, Migliani R, Alami M, Sam-Abbenyi A, 1994. Cameroon: an African model for final stages of Guinea worm eradication. *Am J Trop Med Hyg*, 50:393-400.

Kolberg R, 1994. Finding "sustainable" ways to prevent parasitic diseases. *Science*, 264:1859-1861.

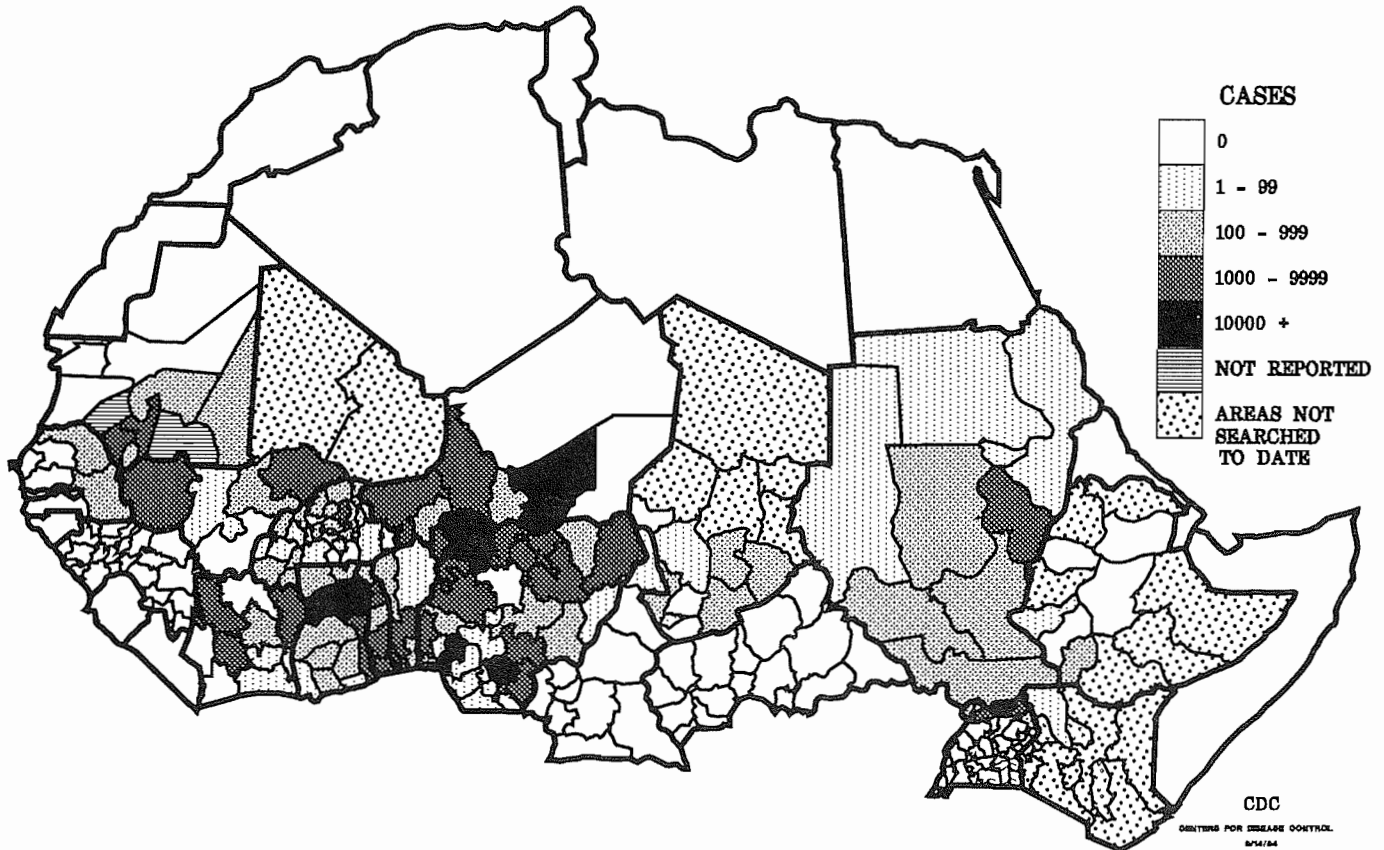
Kumar A, Biswas G, Joshi GC, 1993. Guinea worm disease surveillance and community education through weekly village markets. *J Com Dis (Delhi)*, 25:140-144.

WHO, 1994. Dracunculiasis eradication. Update: Ghana & Nigeria. *Wkly Epidemiol Rec*, 69:161-3.

WHO, 1994. Dracunculiasis - global surveillance summary, 1993. *Wkly Epidemiol Rec*, 69:121-128.

Figure 6

NUMBER OF REPORTED CASES OF DRACUNCULIASIS IN AFRICA: 1993



* * * * *

Inclusion of information in Guinea Worm Wrap-Up does not constitute "publication" of that information.

For information about the GW Wrap-Up, contact Virginia G. Sturwold, EdD, writer-editor, CDC/IHPO, F-03, 1600 Clifton Rd., NE, Atlanta, GA 30333, U.S.A. FAX: (404) 639-0277.



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