



DEPARTMENT OF HEALTH AND HUMAN SERVICES


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Health Service  
for Disease Control  
Prevention (CDC)

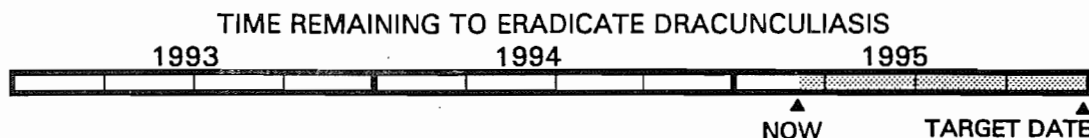
# Memorandum

Date March 6, 1995

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

Subject GUINEA WORM WRAP-UP #47

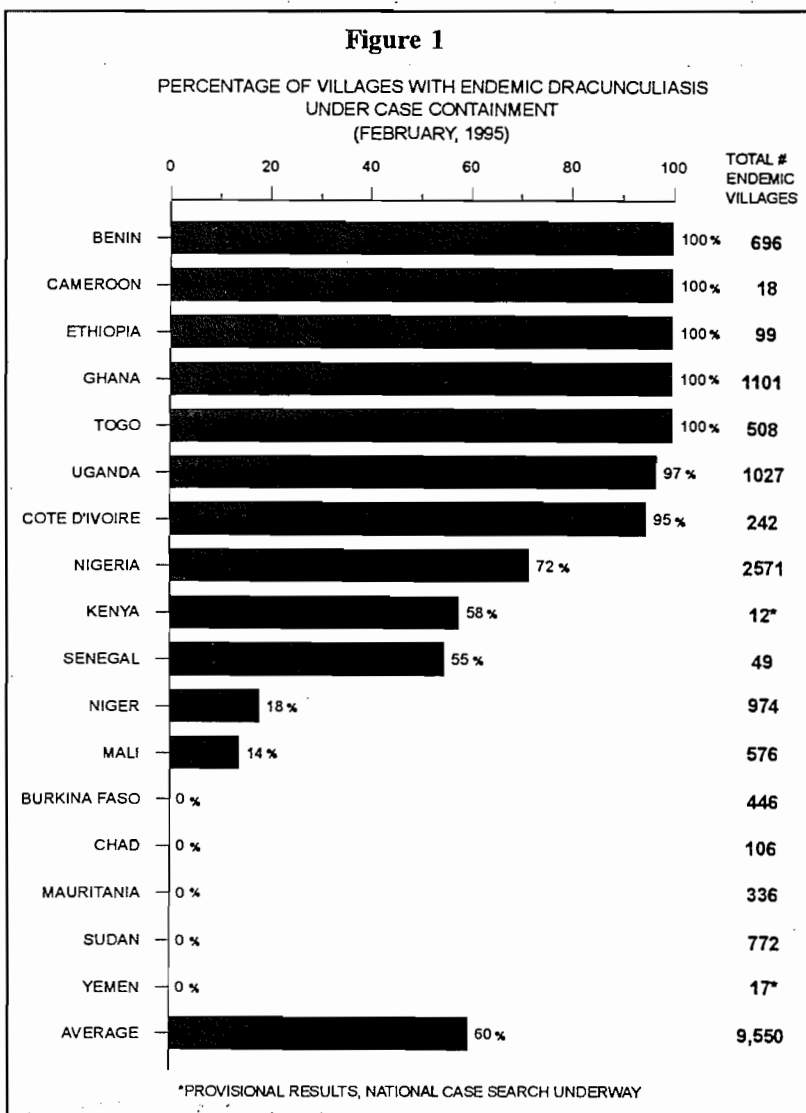
To Addressees



## EDITORIAL: CASE CONTAINMENT: THE PRIORITY FOR COUNTDOWN 1995

As shown in Figure 1, case containment has now been extended to approximately 60% of the 9,550 known endemic villages, as of the end of February 1995. Of the countries which have so far covered less than half of their endemic villages, training of village-based health workers for case containment is scheduled to be completed only in mid- to late- April in Burkina Faso, Chad, Mali, Mauritania, and Niger: at the beginning of this year's peak transmission season for those countries.

The practical feasibility of implementing case containment in all endemic villages (except in areas of civil conflict) immediately is demonstrated by the calculations in Table 1. In the South East Zone of Nigeria, which is the most highly endemic quadrant of one of the two most highly



endemic countries, the average expected number of cases of dracunculiasis per endemic village in all of 1995 is only 9 cases or less! Even if the actual number in some villages were as high, for example, as 32 cases over the year, one village-based health worker could easily manage that number of cases promptly and properly.

**Table 1** NIGERIA GUINEA WORM ERADICATION PROGRAM: SOUTH-EAST ZONE

STATE	NUMBER OF ENDEMIC VILLAGES IN 1994	NUMBER OF CASES IN 1994	EXPECTED NUMBER OF CASES IN 1995*	AVERAGE EXPECTED NUMBER OF CASES TO BE CONTAINED PER VILLAGE IN 1995
ABIA	165	1342	671	4
BENUE	197	3544	1772	9
CROSS RIVER	59	364	182	3
ENUGU	833	8304	4152	5
IMO	5	21	11	2
RIVERS	13	85	43	3
TOTAL	1272	13660	6830	5

\*ASSUMING, CONSERVATIVELY, THAT CONTROL INTERVENTIONS AND CASE CONTAINMENT IN 1994 CAUSED ONLY A 50% REDUCTION OF CASES.

The key for success this year is to develop the capacity to do case containment in every endemic village (that had one or more cases in 1994) and the necessary supervision to ensure that case containment is carried out appropriately. Two potential situations that can lead to not having the necessary case containment capacity in place are: 1) not knowing where cases occurred in 1994, and 2) imported cases during 1995 that are not detected by the program in time to begin control measures promptly. An intensive public awareness campaign and redundant surveillance can increase the sensitivity of surveillance and case reporting, and thereby reduce the risk of those two pitfalls.

Nigeria's two commandments of case containment:

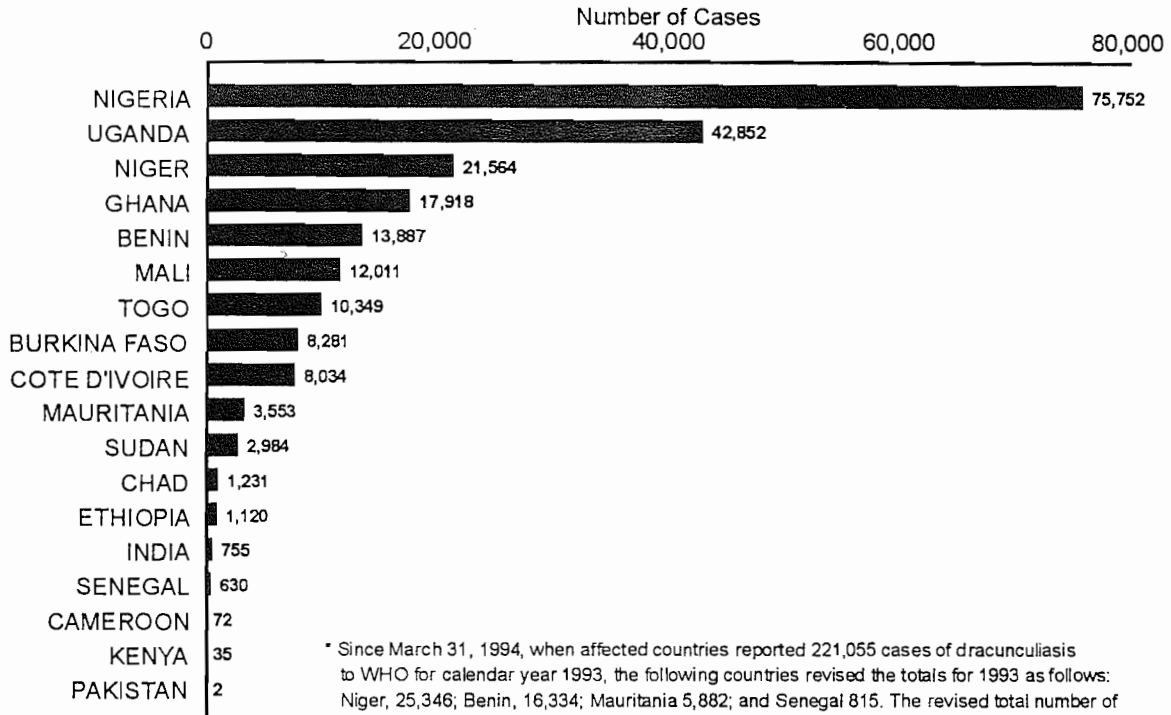
- Detect each case immediately!
- Contain each case completely!

To which Uganda adds:

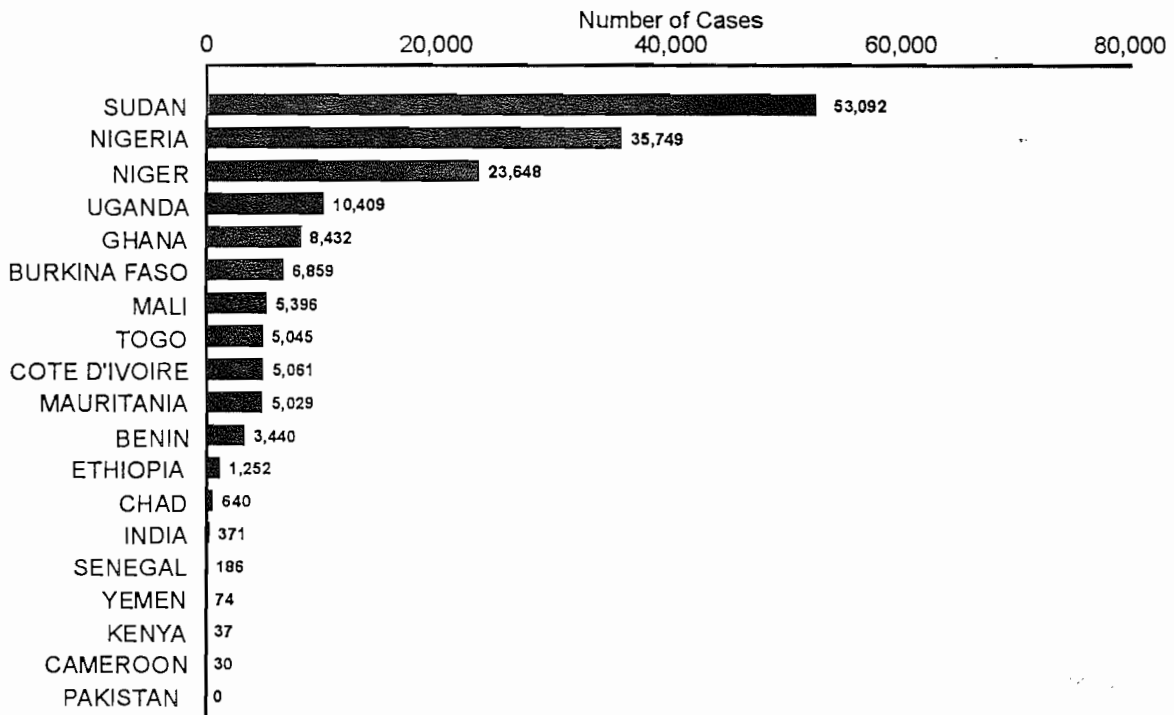
- Count each infected person.
- Contain each emerging worm.

The distribution by country of cases of dracunculiasis reported to the World Health Organization in 1993 and the provisional number reported in 1994 is shown in Figure 2.

**Figure 2** DISTRIBUTION BY COUNTRY OF 221,055 CASES OF DRACUNCULIASIS REPORTED TO THE WORLD HEALTH ORGANIZATION IN 1993\*

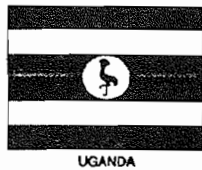


DISTRIBUTION BY COUNTRY OF 164,750 CASES OF DRACUNCULIASIS REPORTED TO THE WORLD HEALTH ORGANIZATION IN 1994\*\*



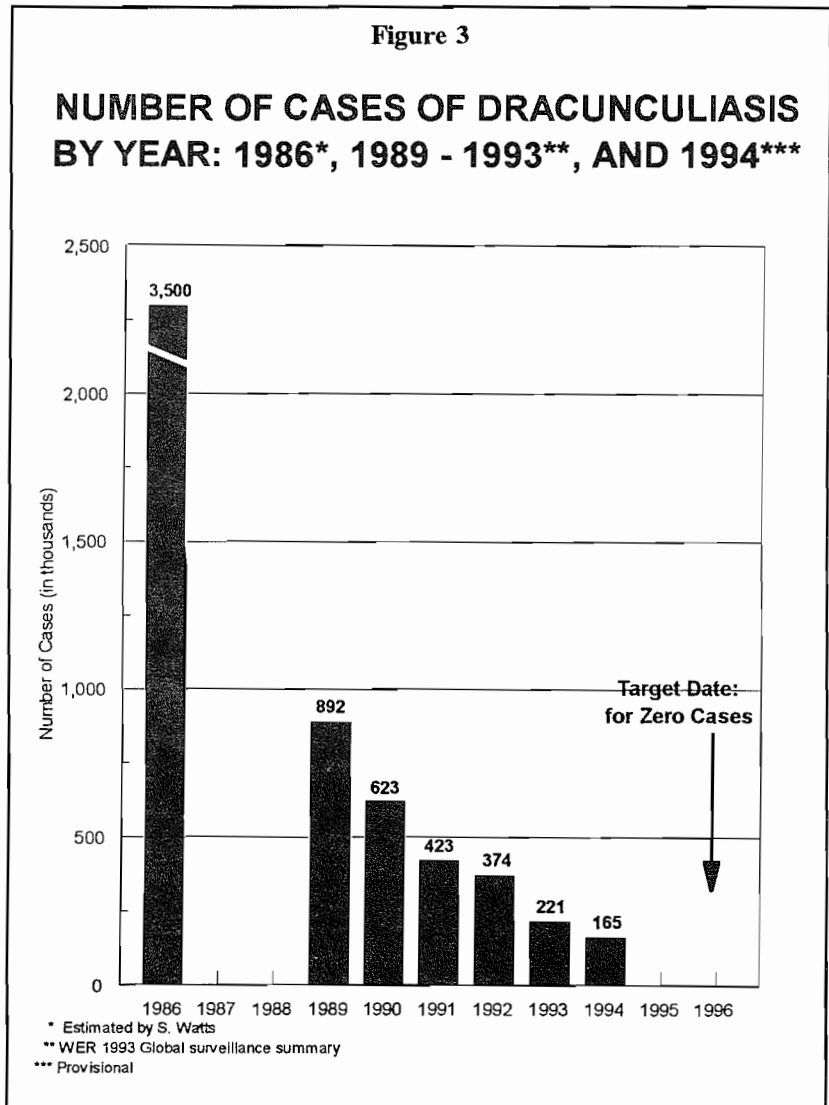
We are now in the realm of "The Final Inch" of the eradication campaign, which is the most difficult and the most exciting phase. For all the difficulties of implementing case containment, however, national programs have already accomplished much on the way to the target date of December 31, 1995, as Figure 3 shows. Together we shall prevail.

**UGANDA: 79% REDUCTION FROM JANUARY 1994 TO JANUARY 1995**



With 85% of its 1,027 endemic villages reporting, Uganda found only 215 cases

of dracunculiasis in the entire country in January 1995, compared to 1,044 cases in January 1994, a reduction of 79.4% (Table 2, Figure 4). This follows an overall reduction of 75.7% in the total cases reported for 1994, against the number reported for 1993. Over 95% of endemic villages have now begun practicing case containment, and about half of the cases reporting in January 1995 were fully contained. Use of Abate for vector control began in Arua District in February.



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The second quarterly Inter-District Meeting of the five most highly endemic districts was held in Gulu on February 2-3. This meeting was attended by the national program coordinator, Dr. Gilbert Mpigika; the UNICEF Country Representative, Ms. Kathleen Cravero; the GW Coordinator for UNICEF/East Africa, Dr. Iyorlumun Uhaa; three consultants from CDC and Global 2000: Mr. Larry Dodd, Dr. Karl Kappus, and Mr. Mark Pelletier; and the Global 2000 resident advisor, Mr. Elvin Hilyer, among others.

**Table 2**

Updated: March 9, 1995

MONTHLY REPORTING OF CASES OF DRACUNCULIASIS IN 1994  
(COUNTRIES ARRANGED IN DECREASING ORDER OF INCIDENT CASES IN 1993)

COUNTRY	NO. OF CASES IN 1993	NUMBER OF CASES REPORTED IN 1994												TOTAL 1994*	% CHANGE 93-94*
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC		
NIGERIA	75752	4995	4023	3564	3036	3241	3627	3652	2570	2009	1877	1610	1545	35749	-53
UGANDA	42852	1044	782	1072	1206	1157	964	980	911	680	628	646	339	10409	-76
NIGER	25346				306	639	2671	4809	6234	2932	5536	518	3	23648	-7
GHANA	17918	834	494	793	888	1144	706	587	304	228	410	956	1088	8432	-53
BENIN	16334	467	499	304	181	118	90	72	96	241	577	795		3440	-79
MALI	12011	38	153	310	288	443	788	1052	1034	571	455	127	137	5396	-55
TOGO	10349	480	423	361	224	222	238	242	249	378	729	861	638	5045	-51
BURKINA FASO	8281	103	254	118	487	529	1040	1205	1121	1194	324	356	128	6859	-17
COTE D'IVOIRE	8034	538	582	452	773	517	615	301	140	207	365	206	365	5061	-37
MAURITANIA**	5882												5029	5029	-15
SUDAN*	2984	556	2023	1321	2934	8964	16872	1002	1346	12788	756	3202	1328	53092	1679
CHAD	1231	67	17	9	2	7	254	120	51	42	69	2		640	-48
ETHIOPIA	1120	1	40	28	129	100	266	210	152	100	102	94	30	1252	12
SENEGAL	815	0	0	0	0	2	17	42	55	50	12	8	0	186	-77
INDIA	755	0	2	1	23	47	70	57	74	64	16	13	4	371	-51
CAMEROON	72	0	0	0	1	5	7	4	5	7	0	0	1	30	-58
KENYA <sup>§</sup>	35	3	20	0	0	2	6	1	0	0	5	0	0	37	6
PAKISTAN	2	0	0	0	0	0	0	0	0	0	0	0	0	0	-100
YEMEN <sup>§</sup>	0													74	??
TOTAL	229773	9126	9312	8333	10478	17137	28231	14336	14342	21491	11861	9446	10657	164750	-28

\* PROVISIONAL NUMBERS.

§ NATIONAL CASE SEARCH UNDERWAY.

\*\* CUMULATIVE TOTALS

\* CASES REPORTED FROM ACTIVE AND PASSIVE SURVEILLANCE.





## IN BRIEF

Burkina Faso. Dr. W. Joseph Cabore, formerly coordinator for the Onchocerciasis Devolution Program, has been appointed national program coordinator for the Guinea Worm Eradication Program.

Central African Republic. Following a brief visit in February, Dr. Alhoussieni Maiga of ITECH reports that 10 cases of dracunculiasis were diagnosed among Sudanese refugees at Mboki, in Region V during 1994. Some 26 villages in the area are considered to be at high risk.

Mauritania. The national coordination cell has been completed, as evidence of the government's actions to provide more support for the NPC, Dr. Sidi Mohamed Ould Mohamed Lemine. The cell includes a national supervisor, Dr. Bounena Ould Abdellahi Salem, an administrator, a hygiene/sanitation technician, and a statistician/computer specialist. The ministry of health and the UNICEF mission plan to help this program to improve its surveillance and interventions by beginning monthly visits to endemic villages in the first quarter of 1995. The need for such remedial actions is evidenced by this program's slow progress in 1993 and 1994 (Table 2). A four-day workshop to introduce case containment was held in Kiffa (Assaba Region) for 22 health workers from all 8 endemic regions in January. Dr. Phuc Nguyen-Dinh of CDC consulted here in January.

Niger. Global 2000 resident advisor Ms. Lesley Chace completed her tour of duty the first week in March. She has been succeeded by Dr. James Zingeser, formerly of CDC. Dr. Sandy Cairncross and Mr. Craig Withers of ITECH consulted here in January.

Yemen. A total of 89 cases have been identified in 17 endemic villages so far. The case search has been completed in four of the 12 districts to be searched. Drs. Trent Ruebush of CDC and Iyorlun Uhaa of UNICEF consulted with the NPC, Dr. Abdul-Hakeem Al-Kohlani, in January. Global 2000 is providing an additional grant of \$35,000, including funds for purchase of a vehicle, to facilitate completion of the case search and implementation of case containment measures before the onset of this year's transmission season in April.

ITECH. The Interagency Technical Team based at Ouagadougou was recently joined by Dr. Jean-Michel N'Diaye, formerly of the UNICEF country office in Burkina Faso, and Dr. Herve Peries, formerly of the UNICEF country office in Mauritania.

## BENIN: PRESIDENT SOGLO RESPONDS TO CHALLENGE

As part of a delegation that met with President Nicephore Soglo of Benin in Cotonou on March 1, Mr. Andrew Agle, Global 2000 director of operations, conveyed President Jimmy Carter's congratulations on the progress made by the Benin GWEP over the past year. Noting that the size of the dracunculiasis problem is now similar in Benin (3440+ cases in 1994), Côte d'Ivoire (5061 cases), Ghana (8432 cases), and Togo (5045 cases), and that all four countries were making good progress, Mr. Agle relayed President Carter's challenge to the presidents of those four neighboring countries to see which would be the first to achieve zero cases. President Soglo accepted the challenge to see that his country would eradicate dracunculiasis before Côte d'Ivoire, Ghana, or Togo. The same challenge will be made to the presidents of the other three countries. National program coordinators Mr. Julien Dossou-Yoyo (Benin), Dr. Sam Bugri (Ghana), Mr. K. Ignace Amegbo (Togo, the host), and Mr. Henri Boualou (Côte d'Ivoire) should prepare to exchange corresponding challenges at the Lome meeting next month!



### JAMES GRANT

*Our readers are undoubtedly already aware of the death of former UNICEF Executive Director Mr. James Grant, on January 28 at the age of 72. He was a strong advocate for the dracunculiasis eradication program since he visited an endemic village in Ghana in March 1989. He mobilized more resources for this eradication program than any other person except President Carter. At a meeting with President Carter in New York on November 9, 1994, Mr. Grant expressed his continued support for efforts towards the global goal to eradicate dracunculiasis by the end of 1995, or as soon as possible thereafter. Throughout his 15-year tenure as Executive Director of UNICEF, he was a fervent believer in the value of setting quantitative goals and then moving heaven and earth in order to achieve them. The world's children have lost a tireless champion. He retired the week before his death.*

### GUINEA WORM ON TELEVISION

- The 1992 documentary, "Guinea Worm: The End of the Road", was broadcast on television channel 12 in Philadelphia, USA on February 20.
- In a nationwide broadcast from the Carter Center in Atlanta on March 13, the Columbia Broadcasting System program, "CBS This Morning", will air an interview with Dr. Donald R. Hopkins of Global 2000 on the progress of efforts to eradicate dracunculiasis.



### MEETINGS

- The Third Program Managers Meeting will be held April 19-21, in Lome, Togo.
- The 1995 Program Review for the endemic anglophone countries is provisionally scheduled to be held September 17-21 in Khartoum, Sudan.

### RECENT PUBLICATIONS



CDC, 1995. Update: Dracunculiasis eradication-Pakistan, 1994. Morbidity and Mortality Weekly Report, 44:117-119.

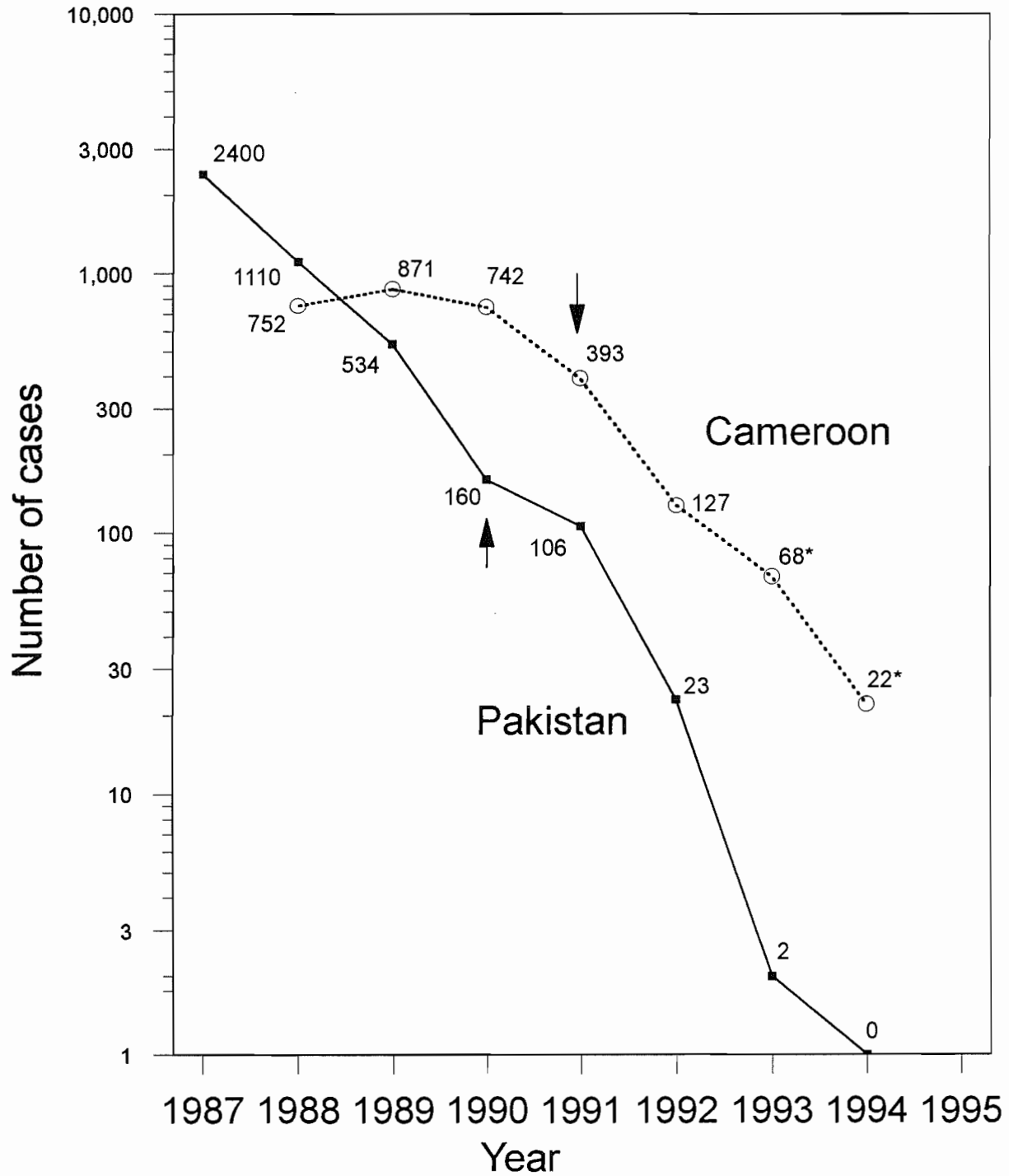
Hopkins DR, Ruiz-Tiben E, Ruebush T II, Agle AN, Withers PC Jr., 1995. Dracunculiasis eradication: March 1994 update. Am J Trop Med Hyg, 52:14-20.

Magnussen P, Yakubu A, Bloch P, 1994. The effect of antibiotic- and hydrocortisone-containing ointments in preventing secondary infections in Guinea worm disease. Am J Trop Med Hyg, 51:797-799.

WHO, 1995. Dracunculiasis eradication. Update: 1994-Pakistan. Wkly Epidemiol Rec, 70:29-30.

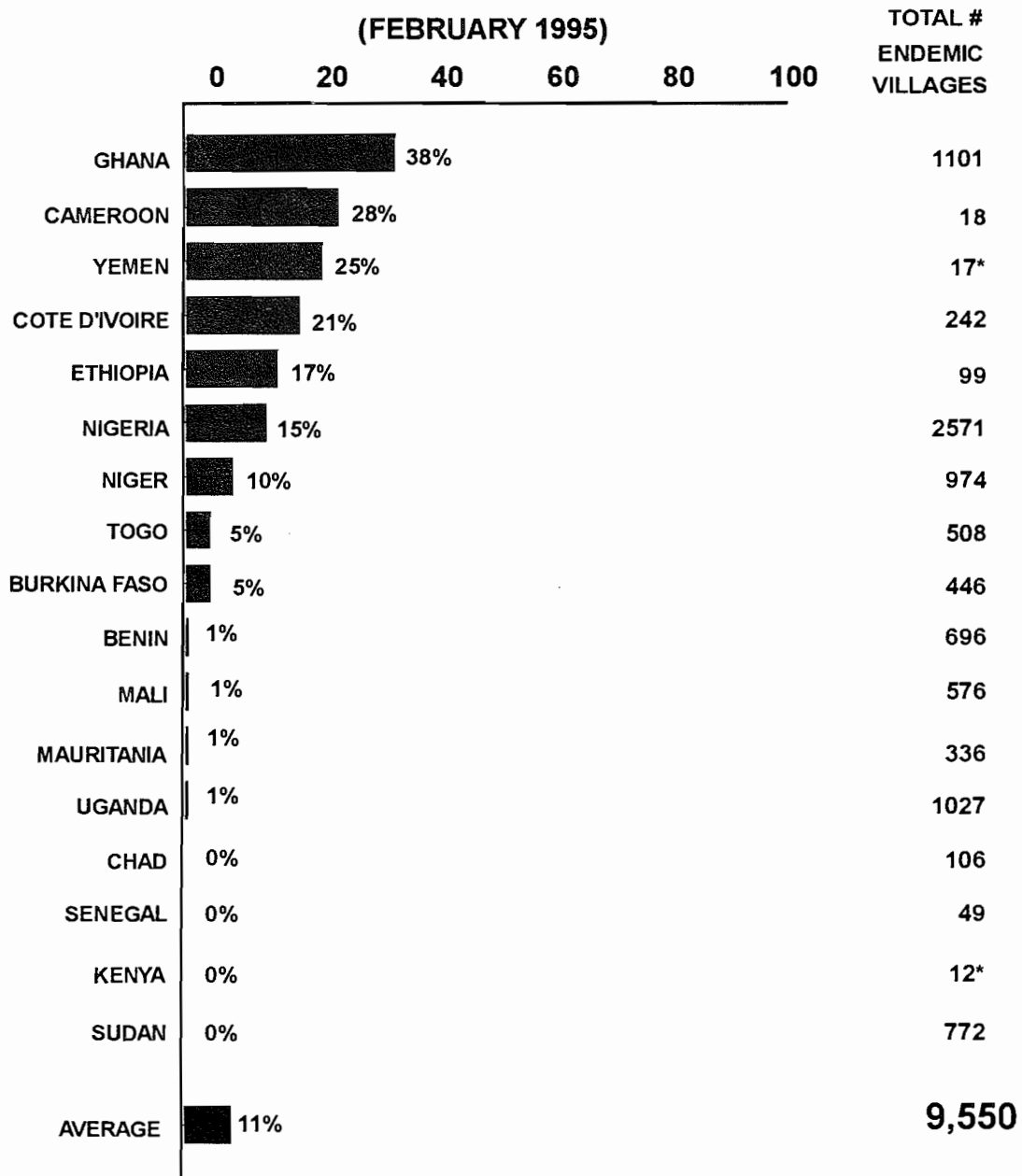
WHO, 1995. Dracunculiasis eradication. Update - Sudan. Wkly Epidemiol Rec, 70:48-50.

## Decline of dracunculiasis cases in Pakistan and Cameroon: 1987-1994



↑ arrows denote when case-containment was started.  
 \* 5 imported cases reported in 1993 and 8 in 1994 not shown.

**PERCENTAGE OF VILLAGES WITH ENDEMIC DRACUNCULIASIS  
UNDER VECTOR CONTROL\*\*  
(FEBRUARY 1995)**



\* Provisional results, national case search underway.

\*\* This intervention may not be appropriate in 100% of endemic villages.

**ROBERT L. KAISER**

**1931-1995**



*With profound sadness and infinite regret, we report the passing of our cherished friend and colleague, Dr. Robert L. Kaiser, on February 9, his 64th birthday. Director of CDC's Division of Parasitic Diseases for many years until his retirement from CDC in 1993, Bob was one of the few early, staunch supporters of the initiative to eradicate dracunculiasis globally. In his 30-year long, illustrious career at CDC, he helped to modify the strategy of malaria eradication to one of malaria control; he was responsible for the development of an influential, now far-flung group of epidemiologists, laboratory researchers, and parasitologists who received their formative training and experience at CDC; and he oversaw the consolidation of three organizational units into a single Division of Parasitic Diseases at CDC in 1980. As a member of the Board of the River Blindness Foundation and of the Mectizan Expert Committee, he sought to help mitigate the effects of onchocerciasis on the lives of populations at risk of that disease. Director of the WHO Collaborating Center for Research, Training, and Eradication of Dracunculiasis from 1987 until his retirement from CDC in 1993, Bob attended the Second Regional Conference on Dracunculiasis at Accra, Ghana, in 1988. He was a valued source of wise counsel and faith in the timely triumph of dracunculiasis eradication. After his retirement from CDC, he was a consultant for dracunculiasis eradication to Global 2000 of the Carter Presidential Center. He lived to see the end of dracunculiasis in Pakistan, and the impending success of dracunculiasis eradication from the globe. He was a perceptive, gentle human being, an esteemed friend, and a skilled administrator. We shall miss his seminal role; henceforth, all publications on dracunculiasis from the WHO Collaborating Center at CDC and from Global 2000 will be dedicated to his memory.*

\* \* \* \* \*

*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.