DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service
Centers for Disease Control
and Prevention (CDC)

Memorandum

Date November 14, 1997

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

Subject GUINEA WORM WRAP-UP #73

To Addressees

Detect Every Case, Contain Every Worm!

PRESIDENT RAWLINGS LAUNCHES FINAL PHASE OF GHANA'S PROGRAM

On Friday, October 17, Ghana's President J. J. Rawlings visited the most highly endemic district remaining in the country, Gushiegu District in the Northern Region, to inaugurate the final phase of the dracunculiasis eradication campaign in Ghana. According to press reports, President Rawlings explained that he chose to go to Gushiegu because it was "the most severely infected locality in Ghana, with 40 percent of the reported cases in the country." The president expressed his deep regret at the resurgence of Guinea worm disease in that area as a result of the disruption of water supplies and health activities during the ethnic conflict in 1994. He reminded the population that Guinea worm disease used to be found almost everywhere in the country, but had since been greatly reduced and even eliminated in many areas.

President Rawlings urged Ghanaians to report every case of the disease "before the worm breaks the skin." He said that among the new efforts being taken by the government, all who reported pre-emergent worms to health authorities would be provided cash rewards, and the patients themselves would also be treated free of charge and paid for any transportation costs to the clinic or hospital. In addition, the government had allocated new funds for provision of safe water in the area. The Regional Director of Medical Services, Dr. Sylvester Anemana, also noted that health authorities have this year expanded vector control and worm extraction services in endemic zones. In June 1988, President Rawlings launched Ghana's Guinea Worm Eradication Program by undertaking a highly-publicized eight-day tour of 21 endemic villages in the Northern Region.

A seven-member team of persons representing The Carter Center/CDC, Ghana Ministry of Health, UNICEF, United Kingdom Department for International Development, and WHO conducted an evaluation of Ghana's Guinea Worm Eradication Program on October 20-31. Team members visited a total of 39 villages (including 9 non-endemic villages) in Northern, Volta, Ashanti, Brong-Ahafo, and Eastern Regions. They deliberately concentrated on areas of the country with significant indigenous transmission, while recognizing that the areas visited were not representative of the country as a whole. They concluded that "thorough guidelines have been produced, and where these are being followed, the program is generally working well." According to their preliminary report, the evaluators "found no evidence that endemic villages were being missed by the program

surveillance", but only 112 (75%) of 150 cases found in the areas visited had been recorded. The evaluators also drew attention to a village (Monkrah) in Kete-Krachi District of Volta Region in which there may have been as many as 50 cases in October, none of whom had been bandaged or the worms extracted, despite the special focus on Volta Region by the national program in recent months. (Volta Region reported a total of 34 cases in September 1997.)

Among several suggestions, the evaluators made the following recommmendations:

- that program staff "should focus their efforts on the most endemic settlements in each region, district, or zone, because eliminating Guinea worm from them is likely to remove it from others";
- that a deputy national program coordinator should be appointed;
- that the program should advocate for providing water without charge to persons in affected communities which have safe sources of water available, and for provision of new or rehabilitated sources in affected areas;
- that it should ensure filtering of water at source and use of vector control in appropriate settings, especially dam water in the four endemic district capitols of the Northern Region; and
- that the reward scheme should be continued unchanged for a year and reviewed annually thereafter.

They also recommended that the introduction of an integrated surveillance system in the Northern Region should be monitored, and that it be recognized that such a system required resources in addition to those for Guinea worm eradication.

TEN COUNTRIES ATTEND PROGRAM REVIEW IN BOUAKE, COTE D'IVOIRE

Côte d'Ivoire hosted the 1997 Program Review for endemic francophone countries on October 20-24, "under the high patronage of the president of the republic and the effective presence of the minister of public health". The Review was held at the Institut National de Formation des Agents de la Santé, where participants were welcomed on behalf of the minister by the director of the cabinet, Mr. Coulibaly Pannan. The current status of the ten programs is summarized below (also see Table 1 and Figure 4).

CAMEROON

(Report presented by the Regional Coordinator, Dr. Dama Mana)

Cameroon has reported only 16 cases in January-September, all of which were imported from Nigeria. There has been no known indigenous case in Cameroon since September 1996. All but one of the cases in 1997 were contained.

SENEGAL

(Report presented by the Field Coordinator, Mr. Georges N'Diaye)

Senegal has reported four cases in January-September 1997. All four cases were from the same village,

and all four were contained. All key interventions are in place in the village, except that it does not have a source of safe drinking water.

CHAD
(Report presented by the National Program Coordinator, Dr. Gagde Hinn-Dandje)

Chad reported 23 cases in eight villages in January-September, which is a reduction of 81% from the 118 cases reported during the same period of 1996. Of the 23 cases, 16 (70%) were fully contained. UNICEF is giving priority to providing safe water sources to the remaining unserved endemic villages.

MAURITANIA
(Report by the National Program Coordinator, Dr. Sidi Mohamed O. M. Lemine)

Mauritania only had data available for January-May 1997, which included 18 cases (83% contained) in 12 villages. This is a reduction of 28% from the same period of 1996, but the peak transmission period in Mauritania is July-September.

BENIN
(Report by the National Program Coordinator, Dr. Aristide Paraiso)

Benin reported 330 cases in January-August, in 119 villages. This is a reduction of 49% from the same period of 1996, but the interruption of activities associated with the change of the national program coordinator during the peak transmission early this year may have led to under-reporting. Of this year's cases, 88% were contained.

TOGO
(Report by the National Program Coordinator, Mr. K. Ignace Amegbo)

Togo has reported 811 cases in 146 villages in January-September. This is a reduction of 19% from last year. Of this year's cases so far, 65% were contained.

MALI
(Report by the National Program Coordinator, Dr. Issa Degoga)

Mali reported 898 cases in 236 villages in January-September, a reduction of 51% from last year, with 71% of this year's cases contained. Use of Abate has increased to 16% of endemic villages so far this year. The main outstanding uncertainty results from the program not having been able to verify alleged cases in a northern region (Kidal) because of insecurity there, but that uncertainty is expected to be resolved soon.

COTE D'IVOIRE
(Report by the National Program Coordinator, Dr. Henri Boualou)

Côte d'Ivoire reported 1,091 cases in 114 villages in January-September, which represents a reduction of 53% from last year. Ninety percent of this year's cases were contained. Hosting this meeting provided additional stimulation for the regional medical personnel and local Peace Corps Volunteers who attended.

Table 1 NUMBER OF CASES CONTAINED AND NUMBER REPORTED BY MONTH DURING 1997*
(COUNTRIES ARRANGED IN DESCENDING ORDER OF CASES IN 1996)

COUNTRY	# OF ENDEMIC VILLAGES: 1/1/97	# OF CASES IN 1996	NUMBER OF CASES CONTAINED / NUMBER OF CASES REPORTED													% CONT.
			JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL+	
SUDAN	5114	118578	1965 / 3590	851 / 1328	5554 / 8709	2591 / 7000	3165 / 7069	1657 / 2336	1802 / 2313	/	/	/	/	/	17585 / 32345	54
NIGERIA	1353	12282	1056 / 1211	1406 / 1425	976 / 1117	806 / 918	952 / 1113	1089 / 1478	1150 / 1649	933 / 1199	379 / 616	/	/	/	8747 / 10726	82
GHANA	602	4877	1498 / 1685	1182 / 1625	904 / 1226	680 / 909	583 / 652	272 / 376	194 / 274	73 / 97	53 / 69	/	/	/	5439 / 6913	79
BURKINA FASO	337	3241	17 / 19	8 / 35	3 / 45	15 / 48	54 / 336	139 / 346	192 / 438	54 / 464	17 / 19	/	/	/	499 / 1750	29
NIGER	416	2956	3 / 7	0 / 0	2 / 4	5 / 14	33 / 59	218 / 435	312 / 731	500 / 857	315 / 485	/	/	/	1388 / 2592	54
COTE D'IVOIRE	216	2794	147 / 160	178 / 197	114 / 129	157 / 200	134 / 149	88 / 89	96 / 97	56 / 56	14 / 14	/	/	/	984 / 1091	90
MALI	430	2402	27 / 44	11 / 11	4 / 4	10 / 21	24 / 31	78 / 107	134 / 182	199 / 315	134 / 190	/	/	/	621 / 905	69
TOGO	249	1626	31 / 121	22 / 33	45 / 57	42 / 68	54 / 113	48 / 63	83 / 140	76 / 76	129 / 140	/	/	/	530 / 811	65
UGANDA	327	1455	6 / 7	1 / 6	27 / 36	110 / 197	295 / 596	160 / 241	84 / 124	35 / 44	57 / 61	/	/	/	775 / 1312	59
BENIN	325	1427	98 / 112	38 / 41	15 / 19	74 / 79	28 / 30	17 / 18	4 / 10	18 / 21	/	/	/	/	292 / 330	88
MAURITANIA	143	562	2 / 2	1 / 1	1 / 1	7 / 10	4 / 4	/	/	/	/	/	/	/	15 / 18	83
ETHIOPIA	57	371	4 / 5	3 / 5	8 / 8	40 / 43	78 / 108	110 / 128	62 / 65	56 / 57	20 / 20	5 / 5	/	/	386 / 444	87
CHAD	12	127	2 / 2	2 / 2	6 / 6	1 / 1	1 / 1	2 / 2	0 / 3	2 / 6	0 / 0	/	/	/	16 / 23	70
YEMEN	7	62	0 / 0	0 / 0	0 / 0	1 / 1	2 / 4	1 / 1	0 / 0	0 / 0	0 / 1	/	/	/	4 / 7	57
SENEGAL	7	19	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	3 / 3	1 / 1	0 / 0	0 / 0	/	/	/	4 / 4	100
CAMEROON**	13	17	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 1	7 / 7	3 / 3	5 / 5	0 / 0	/	/	15 / 16	94
INDIA	3	9	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	/	/	/	/	0 / 0	-
TOTAL+	9611	152805	4856 / 6965	3703 / 4709	7659 / 11361	4539 / 9509	5407 / 10265	3882 / 5624	4121 / 6034	2005 / 3195	1123 / 1620	5 / 5	0 / 0	0 / 0	37300 / 59287	63
% CONTAINED			70	79	67	48	53	69	68	63	69	100	-	-	63	

* Provisional
** Reported 16 cases imported from Nigeria.

NIGER
(Report by the National Program Coordinator, Mr. Sadi Moussa)

Niger has reported 2,592 cases in 324 villages in January-September, representing an increase of 5% over last year. The increase is due to delayed interventions early last year when funding was delayed, and to improved surveillance of cases in small hamlets surrounding endemic villages. In August and September 1997, the number of cases was 45% and 64% less than in the same months of 1996. About half of this year's cases (54%) were contained. Use of Abate has increased to 21% of endemic villages so far this year.

BURKINA FASO
(Report by the Coordinator for the Onchocerciasis Devolution Activity, Dr. Sanou Souleymane)

Burkina Faso has reported 1,750 cases so far this year, but surveillance is known to be incomplete. In September, program leaders investigating cases reported to have been imported into Côte d'Ivoire from Burkina Faso discovered a previously unrecognized endemic village which had had 105 cases in one month.

UGANDA [This report was inavertently omitted in last month's issue of Guinea Worm Wrap-Up]
(Report by the Field Coordinator, Mr. John Okidi)

Uganda reported 1,251 cases in January-August 1997, a reduction of 9% from 1996. Only 57% of cases were contained, primarily because of insecurity in parts of Kotido and Moroto Districts, which have 76% and 18% of all cases, respectively. Only three districts are still endemic (Kotido, Moroto, Kitgum). Drinking water supply is being improved (with UNICEF's assistance) and the program is strengthening other interventions in Kotido and Moroto especially. Cash rewards have been introduced for reporting in all but Moroto and Kotido Districts.

DONATED FILTER MATERIAL TO SIX COUNTRIES

The next shipment of monofilament nylon filter material donated to The Carter Center by DuPont and Precision Fabrics Groups is scheduled to arrive in Africa by sea on November 17. This shipment of 58,000 square yards has been allocated to Guinea Worm Eradication Programs in Nigeria (38,000 sq yds), Benin (6,000), Togo (6,000), Côte d'Ivoire (5,000), Cameroon (1,500), and Chad (1,500). Additional shipments are expected soon for Mali, Niger, and Sudan. Those will be the final shipments of donated filter material.

Figure 1

Dracunculiasis Eradication Campaign

Reported Importations of Cases of Dracunculiasis: Jan. - Oct. 1997

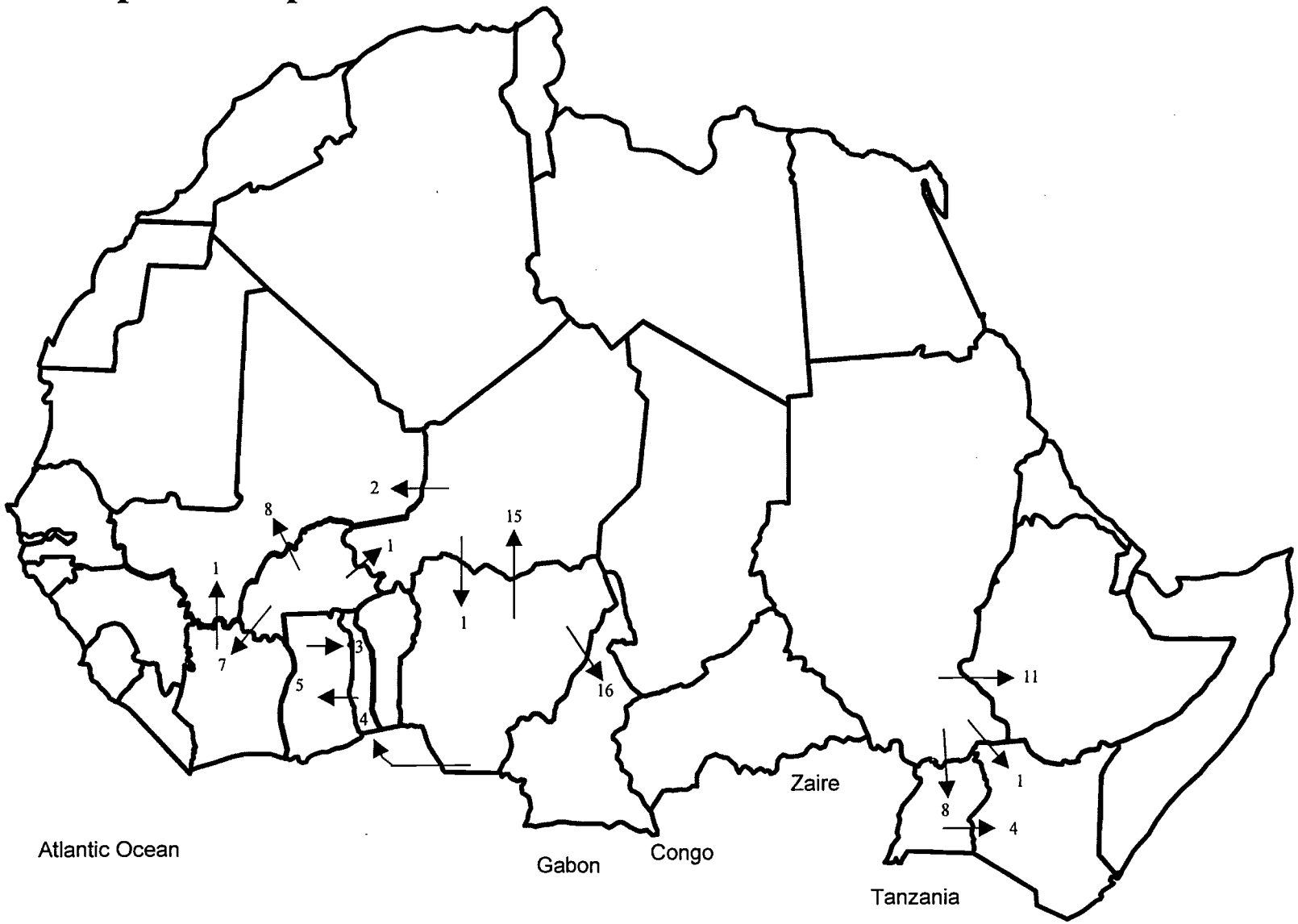
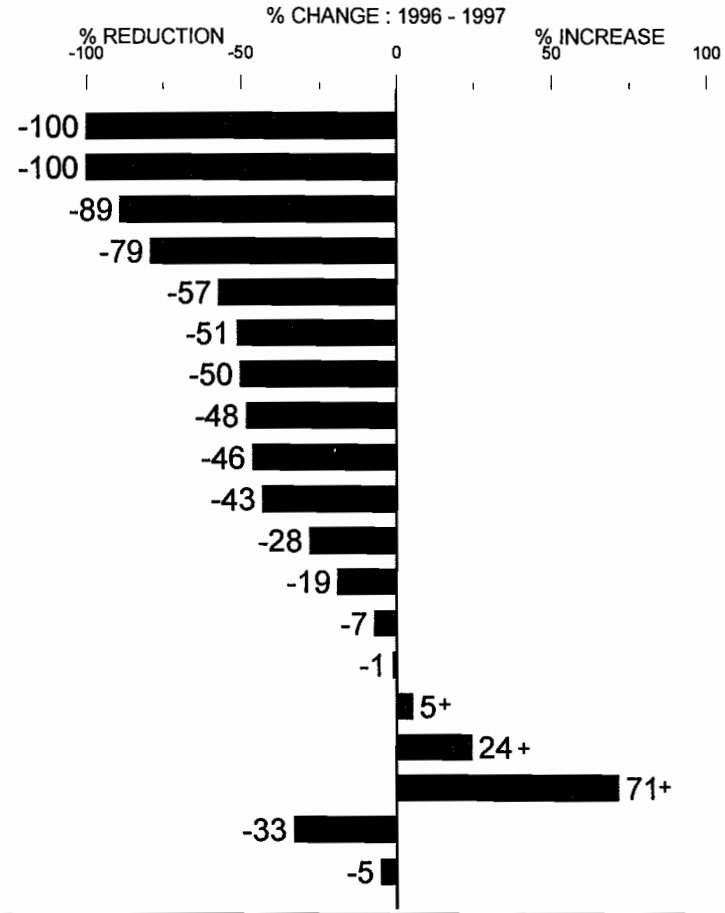


Figure 2

PERCENTAGE OF ENDEMIC VILLAGES REPORTING AND PERCENTAGE CHANGE IN NUMBER OF CASES OF DRACUNCULIASIS DURING 1996 AND 1997*, BY COUNTRY

COUNTRY	ENDEMIC VILLAGES: 1997		CASES REPORTED		% CHANGE : 1996 - 1997
	NUMBER	% REPORTING	1996	1997	
INDIA (8)	3	100	9	0	-100
CAMEROON (9)**	13	100	9	0	-100
YEMEN (9)	9	100	62	7	-89
CHAD (9)	13	100	112	23	-79
COTE D'IVOIRE (9)	226	92	2565	1091	-57
MALI (9)	481	82	1852	905	-51
SENEGAL (9)	7	100	8	4	-50
BENIN (8)	341	91	640	330	-48
SUDAN (7)	5657	37	60211	32345	-46
BURKINA FASO (9)	349	26	3073	1750	-43
MAURITANIA (5)	144	NR	25	18	-28
TOGO (9)	249	100	997	811	-19
UGANDA (9)	405	99	1418	1312	-7
NIGERIA (9)	1661	96	10810	10726	-1
NIGER (9)	416	99	2457	2592	5+
ETHIOPIA (9)	57	97	355	439	24+
GHANA (9)	1041	100	4047	6913	71+
TOTAL***	11094	66	88650	59282	-33
TOTAL WITHOUT SUDAN ***	5437	93	28439	26937	-5

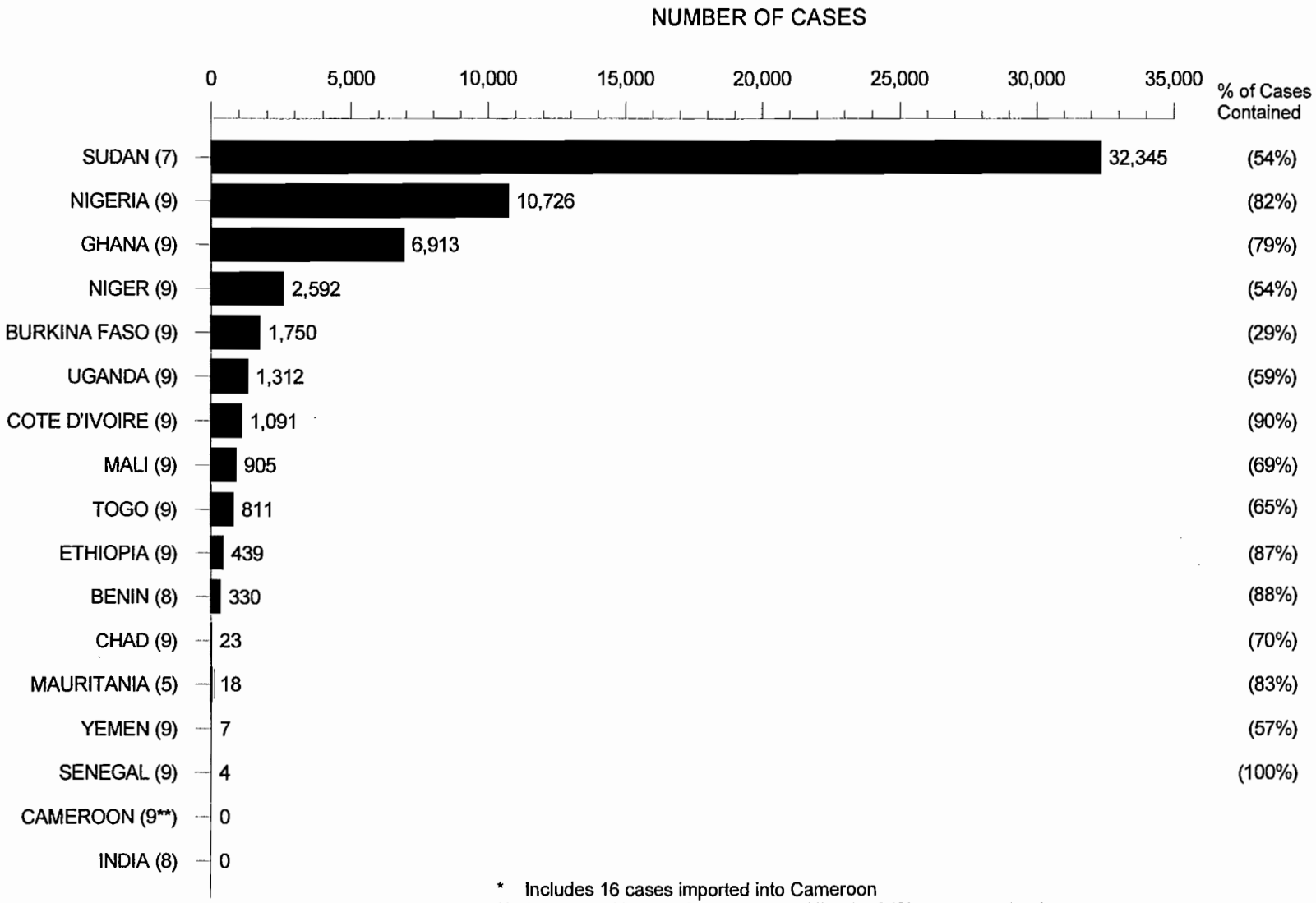


(5) Reports for Jan. - May 1997
(7) Reports for Jan. - July 1997
(8) Reports for Jan. - Aug. 1997
(9) Reports for Jan. - Sept. 1997

NR Not Reported
* Provisional
** Reported 16 cases imported from Nigeria in 1997.
*** Includes 16 cases imported into Cameroon

Figure 3

DISTRIBUTION BY COUNTRY OF 59,282* CASES OF DRACUNCULIASIS REPORTED DURING JANUARY - SEPTEMBER 1997



* Includes 16 cases imported into Cameroon
** Reported 16 cases imported from Nigeria: 94% were contained
(5) Reports from Jan. - May, 1997 (7) Reports from Jan. - Jul., 1997
(8) Reports from Jan. - Aug., 1997 (9) Reports from Jan. - Sept., 1997

Table 2

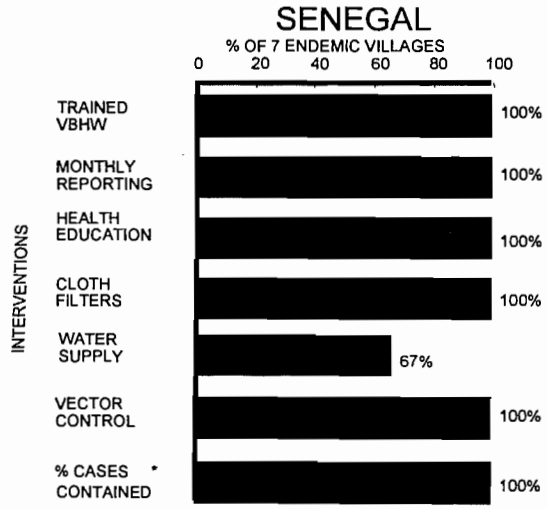
Dracunculiasis Eradication Campaign
Reported Importations of Cases of Dracunculiasis: Jan.- Oct.1997

From	To	Month	Cases		
			Number	Contained	Cross notified
Burkina Faso	Mali	January	2	2	0
		June	1	1	1
		July	3	0	3
		Sept.	2	0	2
	Cote d'Ivoire	May	1	1	1
		August	6	6	6
	Niger	July	1	?	1
Cote d'Ivoire	Mali	June	1	1	0
Ghana	Togo	January	3	1	3
Niger	Nigeria	July	1	1	1
	Mali	July	2	0	0
Nigeria	Niger	March	1	1	1
		June	1	1	1
		??	13	?	?
	Cameroon	June	1	0	1
		July	7	7	7
		August	3	3	3
		Sept.	5	5	5
	Togo	??	4	?	?
Togo	Ghana	January	3	3	3
		March	1	1	1
		October	1	1	1
Sudan	Uganda	March	3	3	3
		July	2	0	0
		August	3	2	2
	Ethiopia	February	2	2	0
		March	2	2	2
		April	1	1	0
		May	2	0	2
		August	2	2	0
		Sept.	2	2	0
	Kenya	August	1	1	1
Uganda	Kenya	January	1	1	0
		June	2	2	0
		July	1	1	0
Total			87	54	51

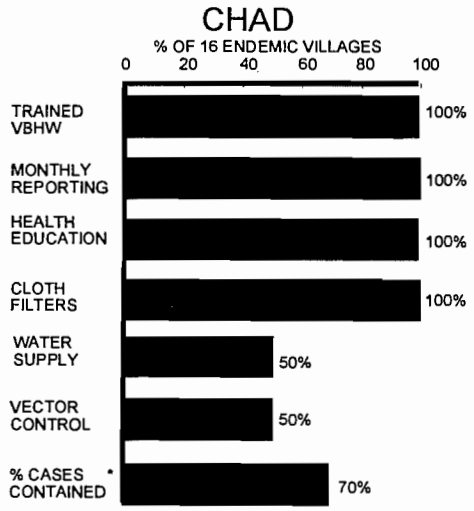
Figure 4

Dracunculiasis Eradication Campaign Interventions: Oct. 1997

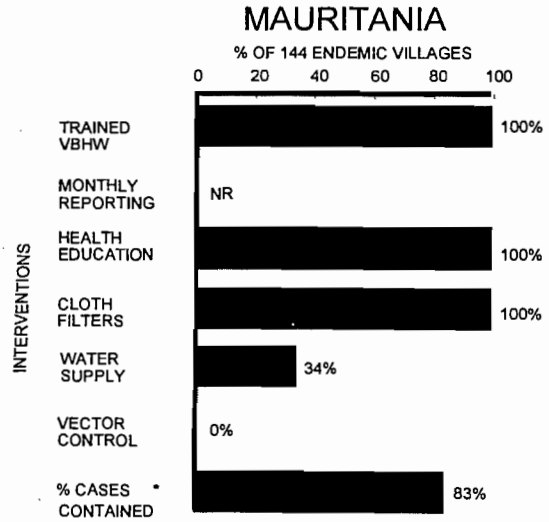
Dracunculiasis Eradication Campaign Interventions: Oct. 1997



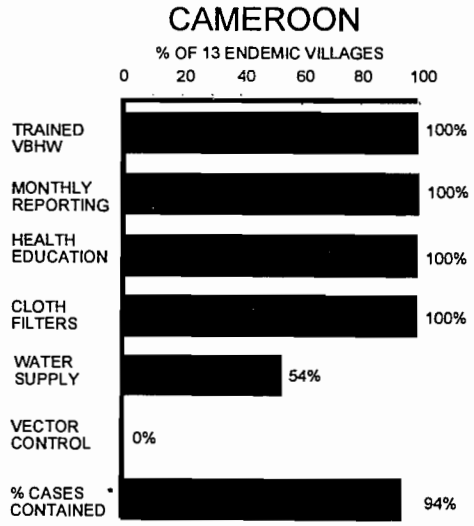
* % of 4 cases detected: Jan. - Sept. 1997



* % of 23 cases detected: Jan. - Sept. 1997



* % of 18 cases detected: Jan. - Sept. 1997



* % of 16 cases detected: Jan. - Sept. 1997

NR - No Report

IN BRIEF:

Dr. Alhousseini Maiga reports that on October 30-31, representatives of the GWEPs of Burkina Faso, Mali, and Niger met in the border town of Dori, Burkina Faso, to discuss issues of mutual interest, particularly implementation of control measures to prevent dracunculiasis among regional nomads, and exportation of cases from Burkina Faso. A summary of the known international importations and exportations of dracunculiasis among all programs is given in Figure 3 and Table 2.

In June, Côte d'Ivoire's program inaugurated a new monthly newsletter, "Drac-Flash!". The inaugural issue notes that the village of Kouassi-Datekro in Bondoukou District which was chosen as the site of the special National Guinea Worm Day celebration in 1996 because it was then the highest endemic village in the country, has reduced its incidence of dracunculiasis from 246 cases in 1996 to only 31 cases so far this year.

Mr. Joshua Ologi has been named Acting Zonal Coordinator for Nigeria's Northeast Zone. Global 2000 has provided a supplementary grant of $21,000 to Nigeria's Southeast Zone to facilitate the implementation of control measures during the impending peak transmission season.

Uganda has appointed a new National Program Coordinator, Dr. C. Hitimana Lukanika, owing to the illness of the former NPC, Dr. Gilbert Mpigika. Dr. Mpigika will continue to act in an advisory capacity to Dr. Lukanika.

U.S. Peace Corps has completed a new training manual, "Animations Skills (Not for Guinea Worm Only)". Developed over the past year, the manual is intended to help inform all Peace Corps Volunteers and their counterparts in endemic countries about the disease and its eradication, as well as give all volunteers and counterparts tools and materials that can be used in village education and extension work. Mr. Scott Tobias of Peace Corps headquarters reports that 2,000 copies of the manual are in the field, that a second printing has already been ordered, and that a French translation is being completed.

Inclusion of information in the Guinea Worm Wrap-Up does not constitute "publication" of that information.
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) 488-4532.

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