DEPARTMENT OF HEALTH & HUMAN SERVICES

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

Date: Aug 23, 2002

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

Subject: GUINEA WORM WRAP-UP #126

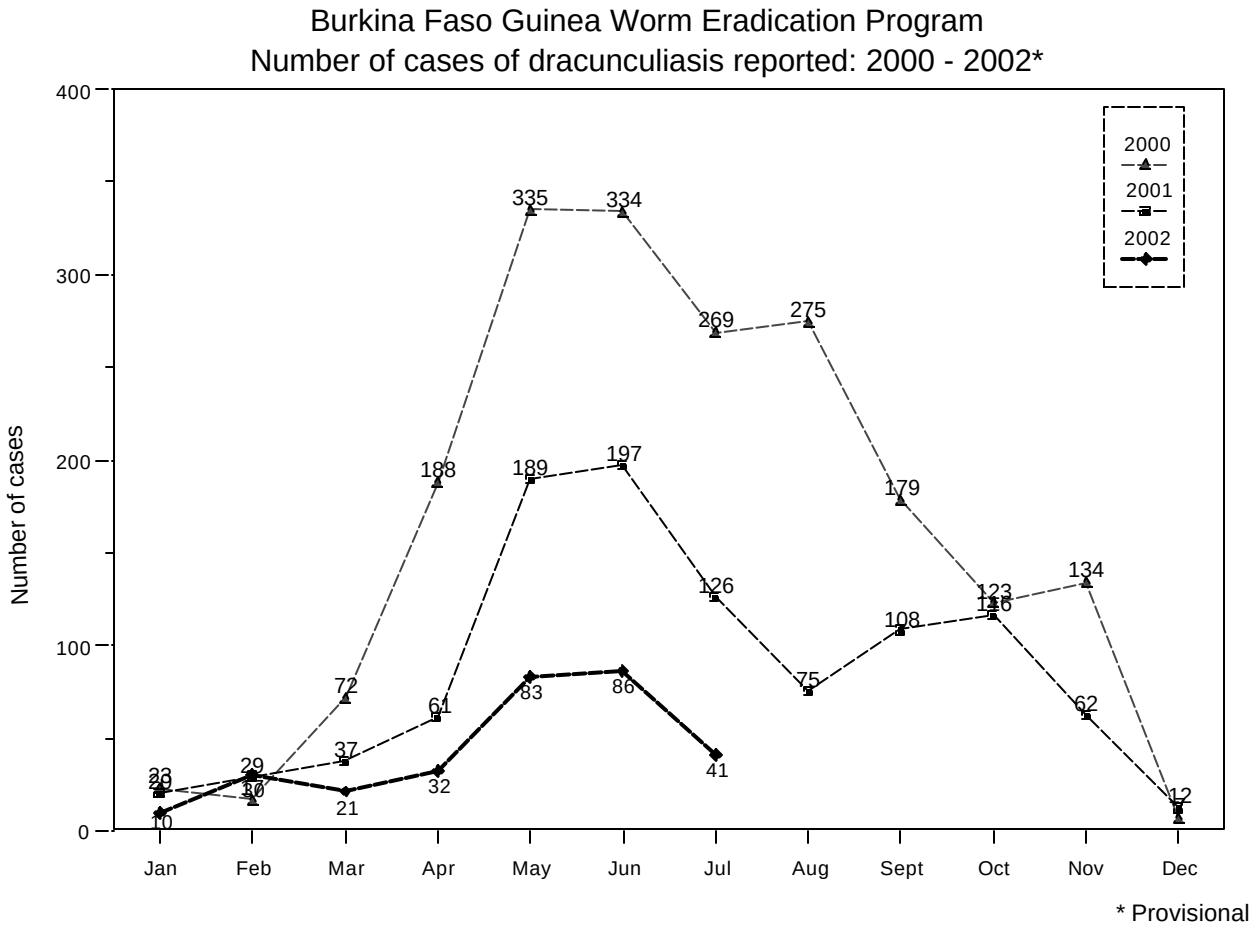
To: Addressees

What's New in 2002?

BURKINA FASO REDUCES ITS CASES BY –54% SO FAR THIS YEAR

As indicated in Figure 1, Burkina Faso has achieved a substantial reduction of –54% in the number of cases of dracunculiasis reported so far in 2002 (302), compared to the 659 cases reported during the first seven months of 2001. The districts of Gorom-Gorom, Gaoua, Batié, Kaya and Ziniaré together reported 60% of all the country's cases in 2001, and are the focus of intensive efforts this year. Whereas the peak transmission season for the latter three districts is March-July, the peak season for Gorom-Gorom and Gaoua Districts is August-November. Gorom District borders Mali's Ansongo District (Gao Region) and Niger's Tera District (Tillabery Region), and Gaoua borders Cote d'Ivoire's Bouna District, and Ghana's Upper West Region.

Figure 1



This program benefits from the dedicated leadership of Dr. Dieudonne Sankara, the national program coordinator. Dr. Sankara maintains tireless, proactive contact with all districts with frequent field visits to respond to outbreak reports and to provide hands-on guidance. The Carter Center/Global 2000 and U.S. Peace Corps have provided most of the external assistance so far this year. In addition to its resident technical advisor and short-term consultants, The Carter Center has provided assistance by funding the surveillance, supervision, prefabrication filters, nylon filter cloth for filter manufacture and distribution, and Abate supply and treatments in all the endemic districts. It has also supported protection of 47 traditional wells in 7 districts and the repair of 7 hand pumps in four villages of the Gorom-Gorom District that reported 57% of the district's cases in 2001.

Global 2000

Peace Corps Volunteers have helped 9 districts to implement Worm Weeks in 18 villages that focused on the proper use of filters, conducting census of households, and organizing health education events. This ensures that villages at risk acquire the knowledge and skills to filter their drinking water properly. As a result of the Worm Week experience, the program now requires that all filters be distributed door-to-door. Cloth filters provided this year by The Carter Center are highly preferred for household use rather than the *tamis* filters with wooden borders that were more difficult (and more expensive) to manufacture, distribute and use. About 50,000 pipe filters and 20,000 funnel filters are also being distributed. Containment centers are in use in the Gaoua District, with several being readied in Gorom-Gorom for its transmission season. The current status of interventions is summarized in Table2.

"There are always results in Guinea worm eradication. If you do good work, there will be good results. If you do bad work, there will be bad results." Dr. Dieudonne Sankara.

IN BRIEF:

Nigeria conducted a "Worm Week" in the eight most endemic villages of Kebbi State (7 in Wasagu Danko LGA, 1 in Zuru LGA) during the week of July 15-22. The activities included use of drama and films in the local language. Ebonyi State reported ZERO cases for July 2002—its first Guinea worm-free month! General (Dr) Yakubu Gowon made advocacy and mobilization visits to Zamfara, Sokoto and Kebbi States from July 22-26. The Nigeria-Cameroon cross-border meeting was held on July 25 in Gwoza, Nigeria. So far, no cases of dracunculiasis have been exported from Nigeria to Cameroon in 2002. The reported percentage of endemic Nigerian villages with filters in 100% of their households has risen from 66% in 2000 to an average of 89% in 2001, to 98% so far in 2002.

Regrettably, the GW Coordinator for Gwer LGA in Benue State, Mr. Anum Ikyegh, was killed in a motor accident while returning from submitting his July 2002 Guinea worm monthly report.

Uganda has reported only 5 indigenous cases in the first seven months of 2002, compared to 47 indigenous cases during the same period of 2001. This includes all of the peak transmission season in Uganda (April-July). A total of 8 cases have been imported into Uganda from Sudan so far this year. Recently increased insecurity in Kotido and Moroto Districts bordering Sudan is a major concern for the Ugandan program.

In Sudan, the northern states have reported 5 indigenous cases of dracunculiasis, all in one village (Al-Mazmoum West) in Sennar State, during January-June 2002. During the same period of 2001, 17 indigenous cases were reported. Nine cases were imported into the northern states from endemic southern states in the same period of 2002, and 11 imported cases in January-June 2001. Of the 14 cases (indigenous and imported) reported in the first half of 2002, only seven (50%) were contained. The program has established 17 containment centers in the key endemic areas of the northern states.

Togo. This program was surprised by an outbreak of 64 cases in the village of Djarapanga, in Sotouboua District in July. The entire district, which reported only 4 cases in July 2001, reported 139 cases this July. Cloth filters have

Table 1

Number of cases contained and number reported by month during 2002*

(Countries arranged in descending order of cases in 2001)

COUNTRIES REPORTING CASES	NUMBER OF CASES CONTAINED / NUMBER OF CASES REPORTED												
	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL*
SUDAN	638 / 1082	534 / 1028	542 / 932	768 / 1480	777 / 2130	810 / 1804	/	/	/	/	/	/	4069 / 8456
NIGERIA	350 / 647	195 / 336	148 / 220	152 / 232	205 / 244	222 / 314	143 / 198	/	/	/	/	/	1415 / 2191
GHANA	497 / 744	389 / 680	303 / 412	283 / 367	305 / 464	281 / 409	158 / 210	/	/	/	/	/	2216 / 3286
TOGO	147 / 192	71 / 99	18 / 39	12 / 26	32 / 90	55 / 85	65 / 229	/	/	/	/	/	400 / 760
BURKINA FASO	7 / 10	26 / 29	20 / 21	22 / 32	66 / 83	57 / 86	38 / 41	/	/	/	/	/	236 / 302
MALI	4 / 5	4 / 5	4 / 5	0 / 0	1 / 6	7 / 10	22 / 42	/	/	/	/	/	42 / 73
NIGER	6 / 6	0 / 0	0 / 0	0 / 0	4 / 4	5 / 5	25 / 40	/	/	/	/	/	40 / 55
COTE D'IVOIRE	90 / 91	52 / 52	23 / 24	9 / 9	1 / 3	1 / 3	/	/	/	/	/	/	176 / 182
BENIN	28 / 28	8 / 11	7 / 8	5 / 5	1 / 1	4 / 4	2 / 2	/	/	/	/	/	55 / 59
MAURITANIA	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	2 / 2	4 / 4	/	/	/	/	/	6 / 6
UGANDA	0 / 0	0 / 0	1 / 1	1 / 1	3 / 3	3 / 4	3 / 4	/	/	/	/	/	11 / 13
CAR	/	/	/	/	/	/	/	/	/	/	/	/	0 / 0
ETHIOPIA	0 / 0	0 / 0	1 / 1	2 / 5	9 / 14	3 / 6	4 / 5	/	/	/	/	/	19 / 31
KENYA	/	/	/	2 / 2	/	/	/	/	/	/	/	/	2 / 2
TOTAL*	1767 / 2805	1279 / 2240	1067 / 1663	1256 / 2159	1404 / 3042	1450 / 2732	464 / 775	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	8687 / 15416
% CONTAINED	63	57	64	58	46	53	60						56

* PROVISIONAL

Shaded cells denote months when zero indigenous cases were reported. Numbers indicate how many imported cases were reported and contained that month.

Uganda reported 1 case imported from Sudan in March and 2 in May.

Ethiopia reported 1 case imported from Sudan in March, 2 in May, and 4 in June.

Kenya reported 2 cases imported from Sudan in April.

Benin reported 4 cases imported from Togo in March and 1 in June, plus 1 case each imported from Ghana in March and April, respectively.

Distribution of Dracunculiasis Cases : January - June 2002
Côte d'Ivoire, Burkina Faso, Ghana , Togo, Benin, and Nigeria,

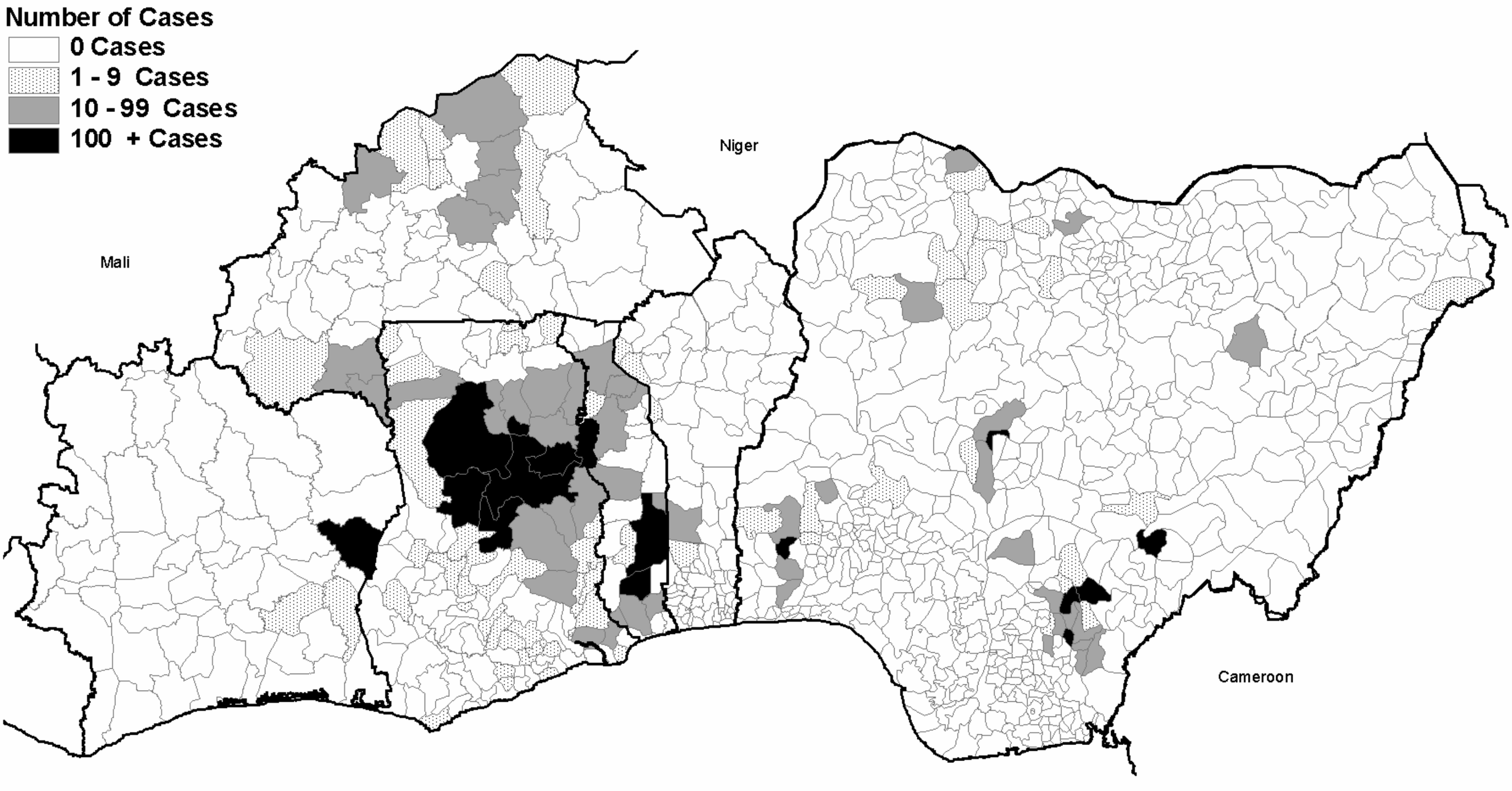


Table 2

Dracunculiasis Eradication Campaign Status of Interventions: 2002*

Country^	Cummulative number of cases reported in 2002	Number of villages reporting 1+ cases in 2001	Reported number of endemic villages, as of month this month	Percentage of Endemic Villages					Case Containment			
				Reporting monthly (Average)	with filters in 100% of households this month	using Abate this month	with 1+ sources of safe water as of this month	provided health education (average)	Total number contained	% contained	Number of cases contained in containment centers	% contained in containment centers
Sudan GOS	2657	737	888	78%	63%	6%	30%	86%	1,312	49%		
Sudan OLS	5,799	3,184	4,233	57%	56%	0%	54%	74%	2657	46%		
All Sudan (6)	8,456	3,921	5,121	61%	57%	1%	50%	76%	3,969	47%		
Nigeria (7)	2,191	773	903	99%	99%	33%	61%	100%	1,415	65%		
Ghana (6)	3,286	779	1047	97%	79%	17%	43%	96%	2,216	67%	99	4%
Togo (7)	760	180	203	100%	92%	90%	47%	100%	400	53%	140	35%
Burkina Faso (6)	302	202	211	95%	60%	36%	89%	74%	236	78%		
Mali (6)	73	120	120	100%	92%	51%	28%	100%	42	58%		
Niger (6)	55	50	50	100%	100%	24%	54%	100%	40	73%		
Cote d'Ivoire (5)	182	28	35	100%	65%	65%	65%	70%	176	97%		
Benin (6)	59	39	46	95%	78%	80%	80%	80%	55	93%		
Mauritania (7)	6	25	25	100%	96%	4%	78%	100%	6	100%		
Uganda (6)	13	16	16	100%	74%	48%	64%	100%	11	85%	4	36%
Ethiopia (7)	31	11	15	100%	82%	45%	36%	100%	19	61%	17	89%
Total (- Sudan)	6,958	2,223	2,671	98%	86%	31%	54%	96%	4,616	66%	260	6%
Global Total **	15,414	6,144	7,792	83%	74%	16%	57%	91%	8,585	56%	260	3%

* Provisional

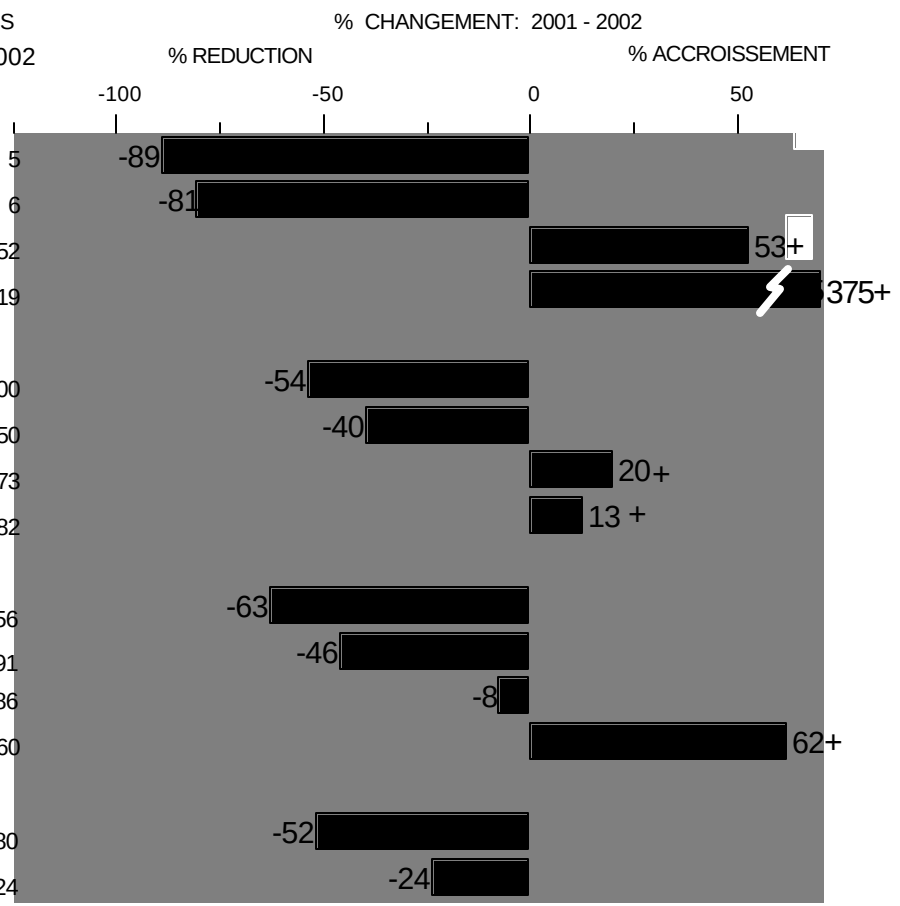
** Excludes 2 cases imported into Kenya from Sudan. No reports received from Central African Republic

^ (6) Denotes the number of months for which reports have been received. Blank cells indicate that a report has not been made available.

Figure 2

POURCENTAGE DE VILLAGES ENDEMIQUES NOTIFIANT ET CHANGEMENT EN POURCENTAGE DANS LE NOMBRE DE CAS AUTOCHTONES DE DRACUNCULOSE EN 2001 ET EN 2002*, PAR PAYS

PAYS	VILLAGES ENDEMIQUES NOTIFIANT 1+ CAS 2000- 2001	% NOTIFIANT	CAS NOTIFIES 2001	CAS NOTIFIES 2002	% CHANGEMENT: 2001 - 2002
OUGANDA (7)	8	100%	47	5	-89
MAURITANIE (7)	25	100%	31	6	-81
BENIN (7)	39	95%	34	52	53+
ETHIOPIE (7)	10	100%	4	19	375+
BURKINA FASO (7)	202	97%	649	300	-54
NIGER (7)	50	100%	84	50	-40
MALI (7)	120	100%	61	73	20+
COTE D'IVOIRE(6)	28	100%	161	182	13 +
SOUDAN (6)	3921	61%	23006	8456	-63
NIGERIA (7)	733	99%	4031	2191	-46
GHANA (7)	779	97%	3569	3286	-8
TOGO (7)	180	100%	468	760	62+
TOTAL*	6122	74%	32145	15380	-52
TOTAL (sans Soudan)*	2201	98%	9139	6924	-24



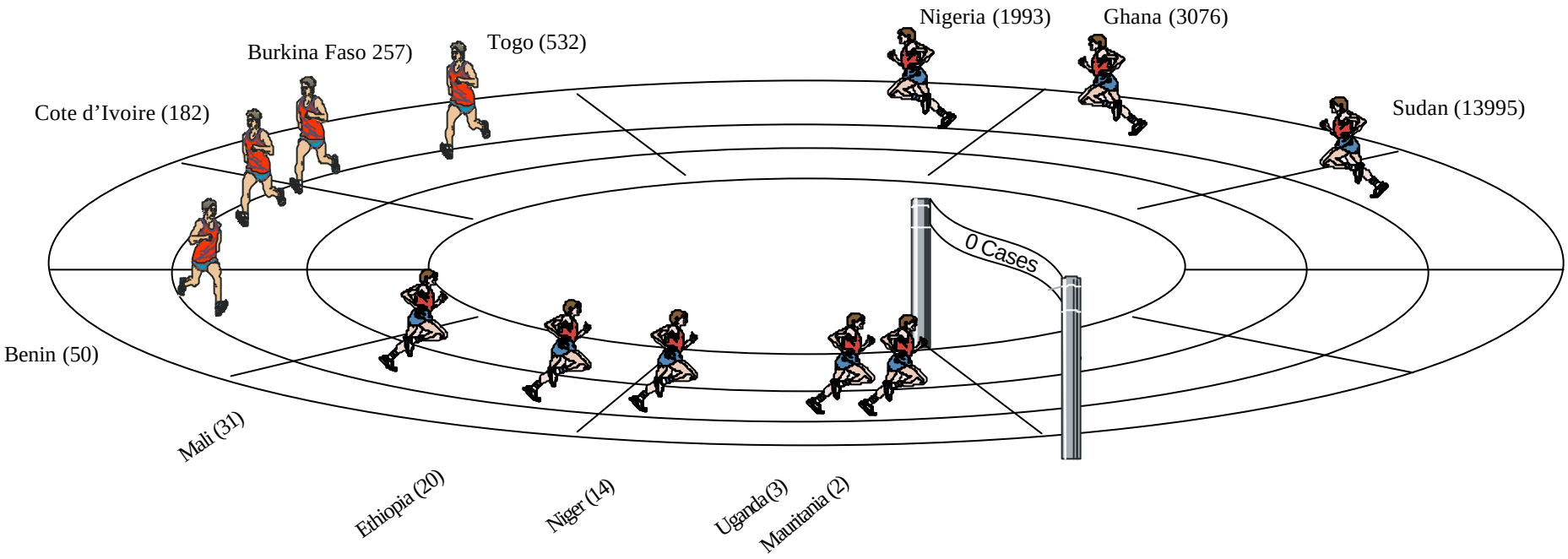
* Provisoire

** Exclus 2 cas importés au Kenya du Soudan.

(6) Dénote le nombre de mois pour lesquels les rapports ont été reçus. Les cellules en blanc indiquent qu'aucun rapport n'a été reçu.

Figure 3

GUINEA WORM RACE: January – June 2002*



* Indigenous cases, provisional.

been provided to all nine endemic villages in the district. An additional containment center is being established in Djarapanga, in addition to the 16 containment centers already functioning elsewhere in the country. Of the 225 cases reported in July, 142 (63%) were contained, including 41 (18%) in containment centers. U.S. Peace Corps/Togo began helping to conduct more "Worm Weeks" in late July in Haho, Agou and Ave Districts. They have also already helped provide 10 theater sketches in the most highly endemic and/or problematic villages of Ogou District and an equal number in East Mono District.

Ethiopia. All 20 indigenous cases reported in January-July were in Gambella Region.

GHANA HOLDS MID-YEAR REVIEW MEETING

Ghana held its second review meeting of regional Guinea worm coordinators for 2002 at Tamale, Northern Region, on August 14-15. Deputy Minister of Health Mr. Moses Dani Baah and Director of Public Health Dr. George Amofa were the senior representatives of the ministry of health, along with the national coordinator, Dr. Andrew Seidu-Korkor. Dr. Ernesto Ruiz-Tiben represented Carter Center headquarters at this review, which was also attended by the national coordinator of Togo's program, Mr. K. Ignace Amegbo, and a Carter Center consultant to that program, Ms. Azalia Mitchell. In opening the meeting, the deputy minister of health reminded participants that "the eyes of the international health community are upon Ghana." He challenged all to "go back to your region or district and … see that every case is detected and that the right steps are taken to stop transmission from every case." During the closing ceremony, the regional and district Guinea worm coordinators all signed a Declaration of Commitment to stop transmission from every case of Guinea worm.

During the first six months of 2002, the number of cases reported in Northern Region, which recorded 78% of all cases in the country, has increased by 11% since January-June 2001, while Brong-Ahafo Region reported –36% fewer cases (11% of the national total), and Volta Region reported –64% fewer cases (6% of the national total). Even more remarkably, five contiguous districts in Ghana's Northern Region—Zabzugu-Tatale, Nanumba, East Gonja, West Gonja, and Tamale—reported 50% of all cases in Ghana in 2001, and 65% of Ghana's cases in January-June this year. Moreover, the same five districts (Ghana has a total of 110 districts) account for 33% of all cases outside of Sudan so far this year. The Northern Region of Ghana is now the highest endemic area for dracunculiasis remaining outside of southern Sudan (see centerfold map).

Two rooms at the newly constructed health post at Woribogu, the second-highest infected village in Ghana's highest endemic district (Zabzugu-Tatale), have been designated to be used as a containment center to help isolate patients with Guinea worm disease in that area. Within five days of the containment center's opening in late July, 24 patients were admitted, and the response so far has been "extremely positive." A total of thirteen containment centers are being established in the five highest endemic districts of the Northern Region.

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*"The practical implication deducible from the general ranking of the various media items in the … study, is that the **radio**, the … **folk drama**, the **mobile cinema** and **group discussions** stand out as the four most effective media for communicating … in [rural] Ghana and other African countries."* K.N. Bame, University of Ghana. Quoted from Culture and Development in Africa, 1982.

GUINEA WORM ON THE AIRWAVES

In Sudan, the national coordinator, Dr. Nabil Aziz, participated in a one-day workshop with ten broadcasters from Radio Omdurman in August to produce more health messages and public announcements about dracunculiasis, for broadcast to southern Sudan. Radio Juba, Radio Malakal and some other stations are already broadcasting Guinea worm messages in Dinka, Nuer and Shilluk languages. In Cote d'Ivoire, radio spots have begun airing in the Tanda Region, where 98% of this year's cases have occurred, five times a day, three days a week in 3 local languages and in French. These spots have been supported by a grant to U.S. Peace Corps by The Carter Center.

Table 3

DRACUNCULIASIS ERADICATION CAMPAIGN
REPORTED IMPORTATIONS AND EXPORTATION OF CASES OF DRACUNCULIASIS IN 2002*

From --> To	Month and number of cases imported													Number of cases exported from
	Jan.	Feb.	Mar.	Apr.	May	Jun	Jul	Aug.	Sept	Oct	Nov	Dec.	Total	
Sudan --> Ethiopia			1		3	5	3						12	Sudan=22
Sudan --> Kenya				2									2	
Sudan--->Uganda				1	2	2	3						8	
Togo --> Benin			4			1							5	Togo=5
Ghana --> Benin			1	1									2	Ghana=6
Ghana --> Burkina Faso				1	1								2	
Ghana --> Niger							2						2	
Burkina Faso--> Niger						1							1	Burkina Faso=1
Nigeria--> Niger					1		1						2	Nigeria=2
Total	0	0	6	5	7	9	9	0	0	0	0	0	36	

* Provisional

REVIEW MEETINGS

The annual review of Carter Center-assisted health programs in Nigeria, which includes the Nigerian Guinea Worm Eradication Program, will be held at Jos, Nigeria on September 23-27, 2002.

The annual Program Review for the Guinea Worm Eradication Programs of Sudan, Ethiopia and Uganda will be held in Nairobi, Kenya on September 30-October 2, 2002.

The annual Program Review for the Guinea Worm Eradication Programs of Benin, Burkina Faso, Cote d'Ivoire, Mali, Mauritania, Niger and Togo will be held at Nouakchott, Mauritania on October 28-30, 2002.

GUINEA WORM RACE: JANUARY- JUNE 2002

Figure 3 shows the status of the international Guinea Worm Race as of the end of June this year. The most notable changes since 2001 are that Nigeria has overtaken Ghana, and Uganda has passed Ethiopia. It remains to be seen over the next six months whether Niger will bypass Cote d'Ivoire, or if Burkina Faso will end the year ahead of Mali.

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 Dr. James H. Maguire, 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: 770-488-7761. *The GW Wrap-Up web location has changed to* [*http://www.cdc.gov/ncidod/dpd/parasites/guineaworm/default.htm*](http://www.cdc.gov/ncidod/dpd/parasites/guineaworm/default.htm)

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