



Date: January 15, 2003



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

Subject: GUINEA WORM WRAP-UP #129

To: Addressees

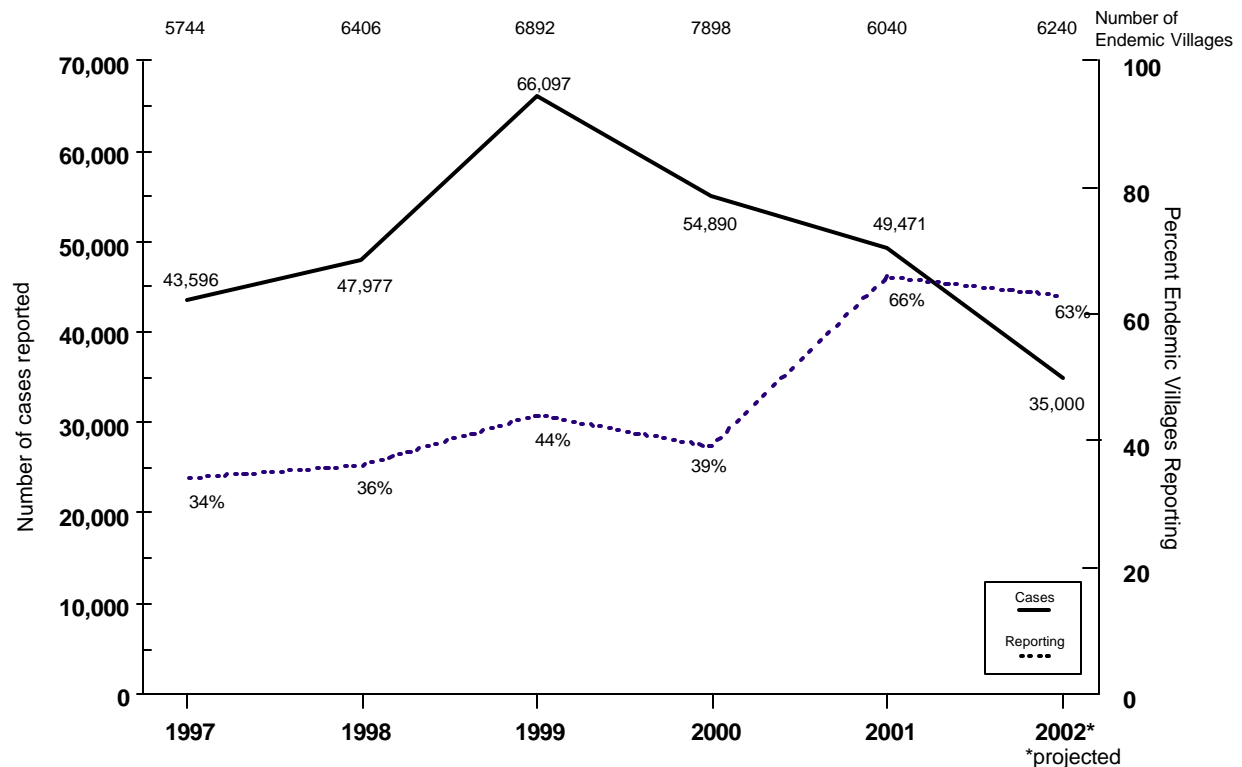
What's New in 2003?

SUDAN: FEWER CASES REPORTED, PREPARING FOR PEACE

Sudan is expected to report a total of about 35,000 cases of dracunculiasis in 2002, which would be a reduction of – 30% from the 49,471 cases which it reported in 2001, despite similar rates of reporting from endemic villages (66%, 63%) in the two years (Figure 1). Much of the reported reduction in cases is from the areas controlled by the Government of Sudan in the south (-68%), compared to the areas controlled by the Sudan Peoples Liberation Movement (SPLM) in the south (-15%) of the country. The reasons for the substantial reduction in reported cases are not entirely clear, but this is the largest such reduction reported since Sudan's program intensified during the "Guinea Worm Cease Fire" in 1995: reported cases fell by –17% in 2000 and by –10% in 2001. In January-October 2002, the northern states have reported 57 indigenous cases, plus 27 cases imported from villages in the south of the country. In addition to the cases exported to northern Sudan, endemic areas in southern Sudan have exported 50 cases to Ethiopia, Uganda and Kenya in January-November 2002.

Figure 1

Sudan: Percentage of Endemic Villages Reporting and Number of Guinea Worm Cases Reported, 1997 - 2002*



In 2001, Sudan distributed more cloth filters for household use (848,576), and far more pipe filters for personal use (7.8 million) than ever before. The program has already distributed more cloth filters than that in January-October 2002: 978,245. (About 3 million additional pipe filters and 860,000 pipe filter replacement clothes were distributed in 2002.) The proportion of accessible endemic villages with cloth filters in all households increased from 63% in 2001 to 68% in 2002. Sudan also expanded broadcasts of health education messages in local languages during 2002. The evaluation of the pipe filter project is still underway in two areas of Western Equatoria State, but provisional reports from three relatively unstable areas in Warab and Lakes (Buheirat) States, indicates that 98% of those surveyed knew about cloth filters, 94% knew about pipe filters, and 80% of surveyed households actually had a cloth filter, but only 50% of individuals interviewed said they had received a pipefilter. This program now has identified 27 operational containment centers in six northern states to facilitate containment of cases there (75% of all cases reported in the northern states in January-October 2002 were reportedly contained). The status of interventions in the southern states of Sudan during the last 4 years is summarized in Table 1.

Table 1

**Status of Performance Indicators for Guinea Worm
Interventions in Southern States of Sudan, 1999 - 2002**

	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002*</u>
<u>Number of Endemic Villages</u>	7,197	5,153	5,978	6,032
Reporting Monthly	44%	38%	66%	63%
Trained Village Volunteer	67%	54%	84%	94%
Guinea Worm Health Education	60%	54%	85%	90%
Full Filter Coverage	26%	28%	62%	68%
Any Safe Water	37%	45%	61%	58%
Using Abate	2%	3%	1%	2%
<u>Cases of Guinea Worm Disease Reported</u>	65,812	54,734	49,339	33,792
Contained/ managed	51%	42%	49%	53%

*Provisional, January – October 2002

Planning continues for escalating the fight against dracunculiasis in post-war Sudan. Overall strategy calls for emphasizing health education and distribution of cloth filters after rapid surveys of newly-accessible areas, and giving special attention to the highest endemic areas of southern Sudan and areas that are most likely to export cases to neighboring countries. The Polio Eradication Program has agreed to include the question, “Has anyone in this village had Guinea worm disease in the past year?”, with a picture of an emerging Guinea worm, on the vaccination forms to be used in the National Immunization Days in March 2003. Surveys of long-inaccessible populations in the Nuba Mountains area of South Kordofan State are continuing (funding provided by the US Agency for International Development), and are scheduled to extend to SPLM-controlled zones beginning in February. The Carter Center will provide training in conflict resolution for health workers from the Nuba mountains in January. The Carter Center/Global 2000 is also helping the Sudanese program to identify the major camps for Sudanese refugees in neighboring countries, and the main camps for internally displaced persons in Sudan, in order to ensure that the camps’ inhabitants are educated and otherwise prepared to avoid getting or dispersing dracunculiasis as they return to their homes when Peace comes. The program is also preparing a Sudanese version of “Guinea worm cloth”.

OUTSIDE SUDAN: MOSTLY GHANA, NIGERIA, TOGO AND MALI

As indicated in Table 2, Ghana, Nigeria, Togo and Mali together have reported 89% of all cases of dracunculiasis outside of Sudan so far in 2002. And one half (50%) of all those cases are concentrated in only 13 districts: 7 in Ghana, 3 in Nigeria, 2 in Mali and 1 in Togo (Table 2; map). The Carter Center/Global 2000 is providing technical assistance to each of these thirteen districts.

Data reported so far in 2002 are summarized in table 3, figures 3 and 4, and the map of West Africa (see insert).

Table 2

Status of Selected Interventions in Key Endemic Districts*

District	Country	Cases		Case Containment Centers		Radio Messages	Worm Weeks	
		reported	(# months)	began	quantity		completed	projected
Zab-Tat	Ghana	777	(10)	12/02	3		10/02	2/03
Haho	Togo	556	(11)	3/02	1	Yes		8/03
Nanumba	Ghana	542	(10)	12/02	2	Yes	10/02	2/03
Tamale	Ghana	487	(10)	12/02	2	Yes	10/02	2/03
East Gonja	Ghana	427	(10)	12/02	3	Yes	10/02	2/03
West Gonja	Ghana	387	(10)	12/02	3	Yes	10/02	2/03
Ibarapa North	Nigeria	387	(11)	12/02	1	Yes		none
Ado	Nigeria	322	(11)		0	Yes		1/03
Gao	Mali	315	(10)	11/02	1			none
Guma	Nigeria	311	(11)		0			3/03
Atebubu	Ghana	264	(10)		0	Yes		1/03
Kintampo	Ghana	261	(10)	12/02	1		6/02	1/03
Ansongo	Mali	241	(10)		0			none

* these 13 districts reported 5,277, or 50% of all cases outside Sudan for this period (10,638)

In **Ghana**, increased technical assistance and personnel (see Guinea Worm Wrap-Up #127) have helped the program to strengthen supervision in the remaining endemic areas. One result is more complete active surveillance, and the detection and reporting of substantially more cases since May 2002 than in the same months of 2001. Comparable intensified measures have also been taken to strengthen containment of the cases, with 15 case containment centers operating as of December 2002. The program will implement additional “Worm Weeks” of intensive health education and community mobilization in the seven highest endemic districts in January and February 2003, with support from UNICEF/Ghana, The Carter Center, and U.S. Peace Corps. This will include the first such Worm Week ever held in Atebubu District, which has not yet identified a facility to contain and care for dracunculiasis patients (Table 2). Ghana’s reported case containment rate was 68% in 2001 and is 69% so far in 2002.

Ghana’s Ministry of Health has designated Chief Gilbert S.S. Bakari, who is also an agricultural engineer, as eminent spokesperson and advocate for the program in the Northern Region. He has already begun to record messages to be broadcast by radio. Welcome, Chief Bakari!

Nigeria has improved its filter coverage (from an average 84% endemic villages with filters in all households in 2001 to 98% in 2002) and the proportion of endemic villages with at least one source of safe drinking water (from 45% average in 2001 to 57% in 2002). The Nigeria program also began implementing Worm Weeks for the first time in 2002 (it needs to extend these to Ibarapa North and Guma LGAs immediately). The reported rates of case containment during 2002 have not improved since 2001 (65% both years). A case containment center began operating in Ibarapa North Local Government Area (LGA in December 2002 (Table 2). Former Nigerian head of state General (Dr.) Yakubu Gowon made a return advocacy visit to Ebonyi State in December, and he plans to re-visit Benue State (locus of Ado and Guma LGAs –see Table 2) early in 2003. Unfortunately, the dramatic reductions in cases achieved by Ebonyi State during its peak transmission season early in 2002 have been followed by increases in cases in Benue (810 cases in January-November 2002, a 49% increase since 2001), Oyo (623 cases, a 205% increase), and Niger (350 cases, a 169% increase) States during their peak seasons later in the year. The Nigerian program confronts the same

Table 3

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	674 / 1148	567 / 1103	607 / 1139	854 / 1612	2728 / 5422	3106 / 6429	3391 / 6589	1708 / 3618	2845 / 4391	1367 / 2341	92 / 178	/ /	17939 / 33970
NIGERIA	350 / 647	195 / 336	148 / 220	152 / 232	205 / 244	222 / 314	143 / 198	125 / 246	107 / 175	163 / 245	319 / 427	/ /	2129 / 3284
GHANA	497 / 744	389 / 680	303 / 412	283 / 367	305 / 464	281 / 409	158 / 210	119 / 139	105 / 128	368 / 534	432 / 776	/ /	3240 / 4863
TOGO	147 / 191	71 / 103	19 / 40	12 / 27	34 / 92	55 / 81	69 / 236	45 / 80	51 / 70	178 / 209	136 / 212	/ /	817 / 1341
BURKINA FASO	6 / 10	26 / 29	20 / 21	22 / 32	66 / 83	57 / 86	42 / 46	30 / 48	57 / 64	63 / 102	31 / 37	/ /	420 / 558
MALI	4 / 5	4 / 5	4 / 5	0 / 0	2 / 6	5 / 9	23 / 43	77 / 178	176 / 301	139 / 205	45 / 72	/ /	479 / 829
NIGER	6 / 6	0 / 0	0 / 0	0 / 0	4 / 4	5 / 5	25 / 40	19 / 30	23 / 30	37 / 83	22 / 38	/ /	141 / 236
COTE D'IVOIRE	91 / 91	52 / 52	23 / 24	10 / 10	1 / 3	2 / 5	0 / 1	2 / 3	2 / 2	0 / 0	3 / 5	1 / 1	187 / 197
BENIN	28 / 28	8 / 11	7 / 8	5 / 5	1 / 1	4 / 4	2 / 2	7 / 7	15 / 19	26 / 28	43 / 44	/ /	146 / 157
MAURITANIA	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	2 / 3	5 / 5	7 / 12	5 / 14	4 / 5	0 / 1	/ /	23 / 40
UGANDA	0 / 0	0 / 0	1 / 1	1 / 1	2 / 3	1 / 4	3 / 4	2 / 3	5 / 5	0 / 0	0 / 0	/ /	15 / 21
CAR	/ /	/ /	/ /	/ /	/ /	/ /	/ /	/ /	/ /	/ /	/ /	/ /	0 / 0
ETHIOPIA	0 / 0	0 / 0	2 / 3	1 / 6	11 / 11	6 / 7	5 / 5	6 / 6	6 / 6	1 / 1	2 / 2	0 / 0	40 / 47
CAMEROON	/ /	/ /	/ /	/ /	/ /	/ /	/ /	1 / 1	/ /	/ /	/ /	/ /	1 / 1
KENYA	1 / 1	/ /	3 / 3	3 / 3	4 / 4	/ /	1 / 1	/ /	/ /	/ /	/ /	/ /	12 / 12
TOTAL*	1804 / 2871	1312 / 2319	1137 / 1876	1343 / 2295	3363 / 6337	3746 / 7356	3867 / 7380	2148 / 4371	3397 / 5205	2346 / 3753	1125 / 1792	1 / 1	25589 / 45556
% CONTAINED	63	57	61	59	53	51	52	49	65	63	63	100	56

* PROVISIONAL

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

Benin reported 4 cases imported from Togo in March and 1 in June, and 2 in August plus 1 case each imported from Ghana in March and April, respectively.

Uganda reported 1 case imported from Sudan in April, 2 in May, 2 in June, 2 in August, and 5 in September.

Ethiopia reported 1 case imported from Sudan in March, 5 in May, 4 in June, 3 in July, 4 in August, 3 in September, 1 in October, and 2 in November.

Cameroon reported 1 case imported from Nigeria in October.

Kenya reported 1 case imported from Sudan in January, 3 in March, 3 in April, 4 in May, and 1 in September.

Distribution of 11,516 Cases of Dracunculiasis in West Africa :January – November 2002*

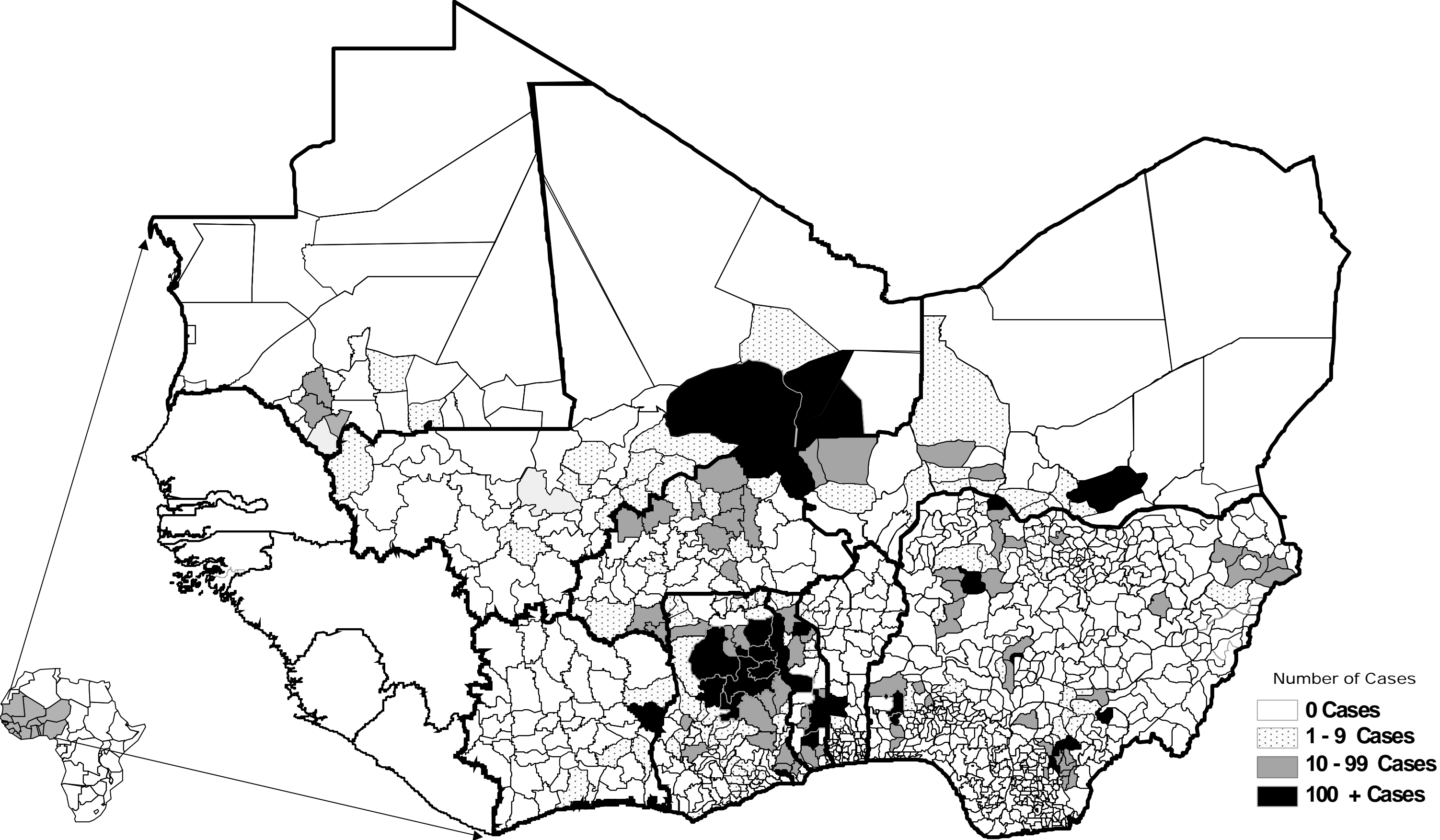


Figure 2

Distribution by Country of 45,428 Indigenous Cases of Dracunculiasis Reported During 2002*

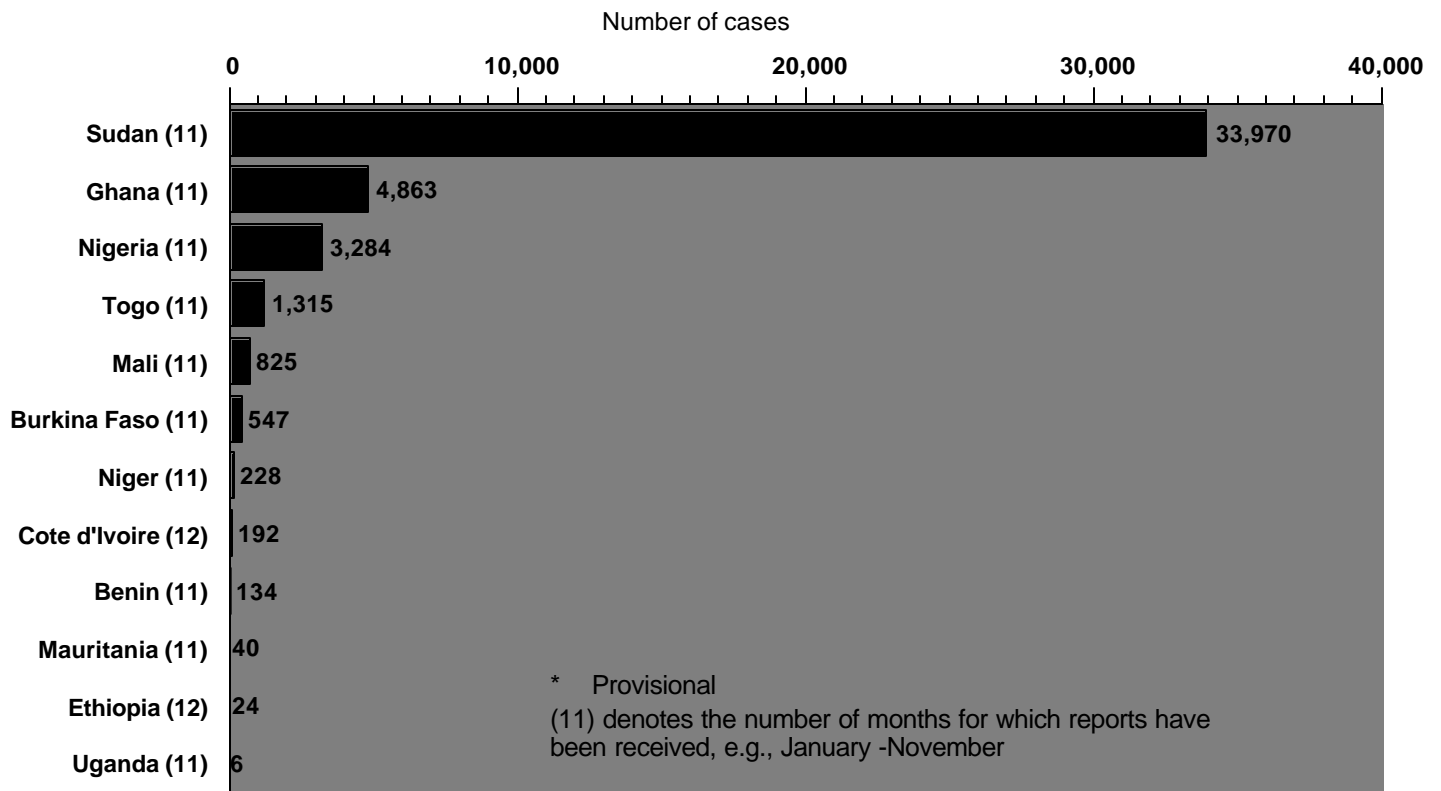


Figure 3

Distribution of 45,555 Cases of Dracunculiasis Reported During January - November 2002*

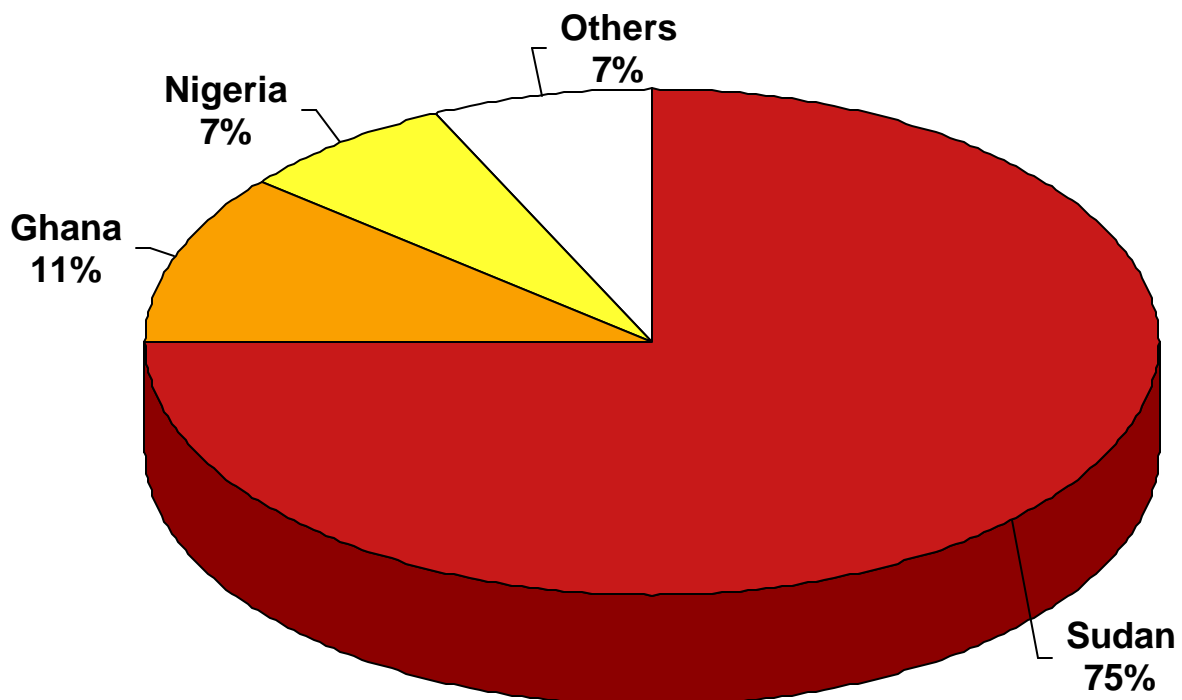
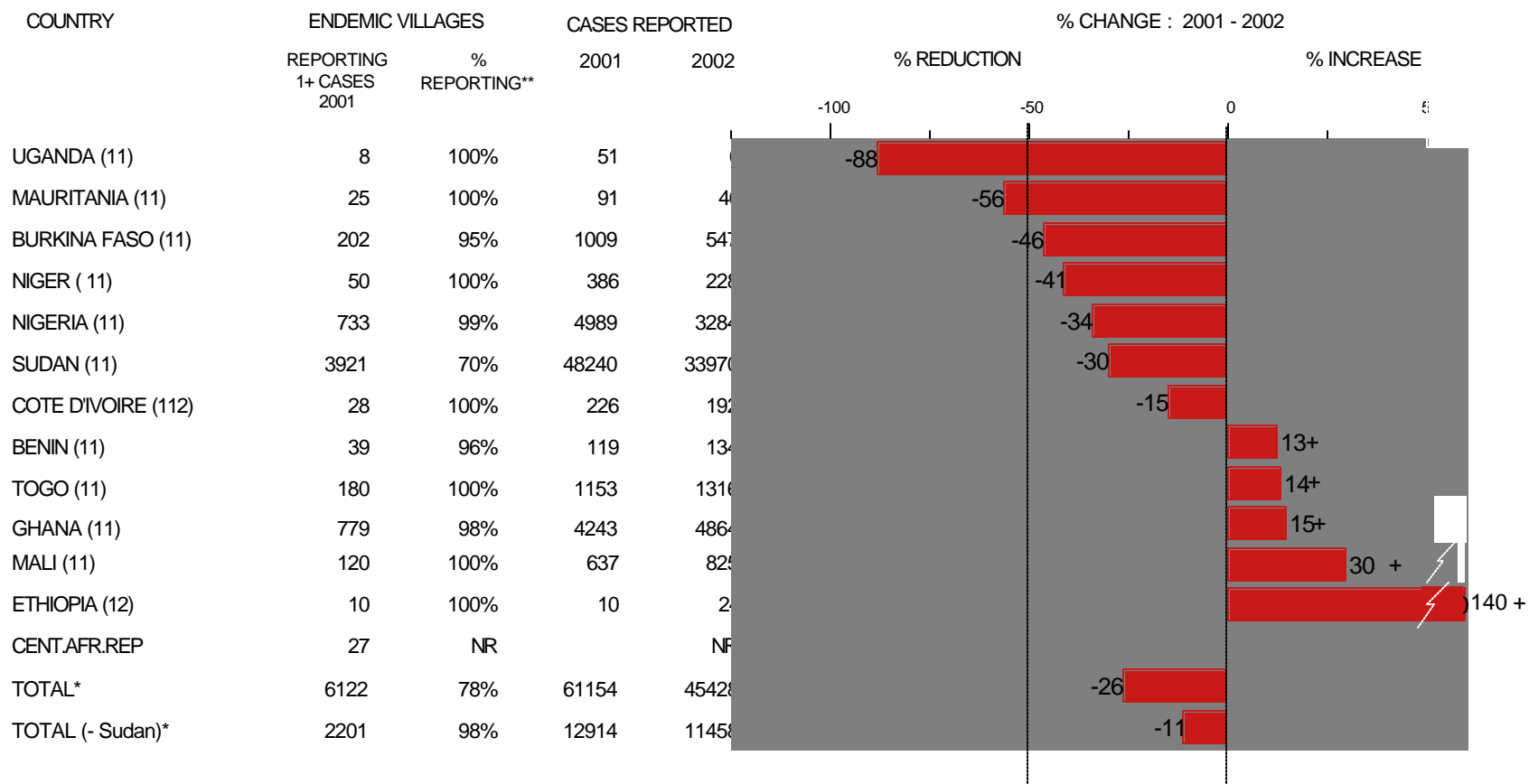


Figure 4

Percentage of Endemic Villages Reporting and Percentage Change in Number of Indigenous Cases of Dracunculiasis During 2001 and 2002*, by Country



* provisional

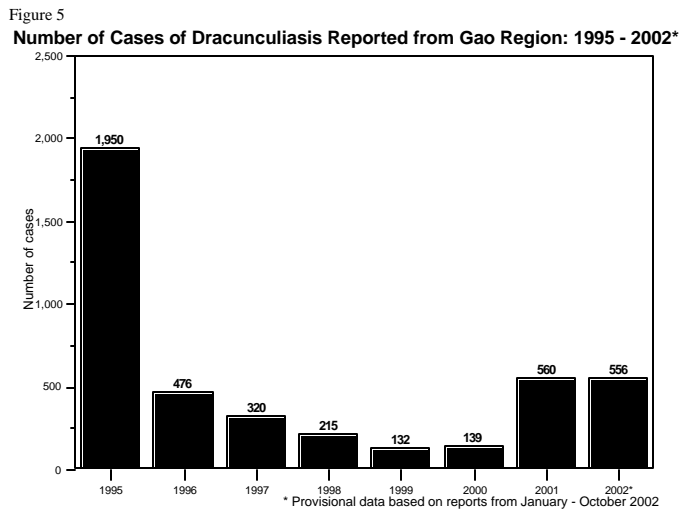
(11) Indicates month for which reports were received, i.e., Jan. - Nov. 2002

NR No Report

challenges in these three states as in Ghana and other programs' residual endemic areas: poor supervision, bad surveillance, and failure to contain effectively those Guinea worm cases that the program does know about. Overall, Nigeria reduced its cases by -34% in January-November 2002.

In **Togo**, where the peak transmission season extends from October through February, the number of cases reported was reduced by -24% in November, following a reduction of -32% in October 2002. Following monthly increases for most of the year, this downturn may reflect the impact of more effective isolation of cases in case containment centers, which Togo began using in August 2001. The 15 villages where this strategy was employed in November 2001 reported -89% fewer cases in November 2002. The village of Kpatala (Ogou Region), which experienced an explosive outbreak of 115 cases in November 2001, detected only 4 cases in November 2002, and Ogou Region, which reported more cases (830) than any other region in the country in 2001 has reduced its cases by -49% in January-November 2002. Togo's main endemic area now is Haho District, where reported cases have increased 369%, to 558, so far in 2002. Togo reportedly contained 85% of its cases in October 2002, but only 64% in November. Of the 136 cases that were contained in November, 96 were referred to a containment center. Overall, Togo reportedly contained 62% of its cases in 2001 and 61% so far in 2002. The presence of so many cases in Ghana's Zabzugu - Tatale District, on the border with Togo, is an extreme danger to Togo's Program, which has been surprised several times before as a result of weak surveillance and inattention in non-endemic or low endemic districts.

Mali's Gao and Tinmuktu Regions have reported increases in cases since 2001, eg. see figure 5, and are now the areas where transmission of the disease is the most intense. A total of 829 cases have been reported from Mali so far during 2002 and 93% of these cases have been reported from contiguous Gao (Gao Region), Ansongo (Gao Region), and Gourma Rharous (Timbuktu Region) Districts, where cases among nomadic Tamashek populations occur in common with similar groups in neighboring parts of Niger and Burkina Faso (see Guinea Worm Wrap-Up #128). Dr. Ernesto Ruiz-Tiben of The Carter Center/Global 2000 visited Mali from 26 November to 3 December to meet with officials in Bamako and Gao, including the national coordinator (Dr. Issa Degoga), and Global 2000's resident technical advisor (Dr. Mamdou Bathily), and to assess epidemiologic and programmatic aspects of activities in this area. He also attended a monthly meeting of Mali's Intersectoral Committee for Guinea Worm Eradication. He made several urgent recommendations that are intended to strengthen the focus and effectiveness of operations in this difficult area. Mali's Guinea Worm Eradication Program will hold its annual national review meeting in Gao during the week of January 21-25, and will invite national coordinators from the programs in Niger and Burkina Faso to attend. The U.S. Peace Corps has agreed to have four of its volunteers in Gao Region participate in eradication activities there. Mali has halted transmission of dracunculiasis in most of the remainder of the country. Of the 16 indigenous cases reported in Mopti Region in January-October 2002, 15 occurred in one village, and all but one were reportedly contained. Another 20 cases were imported into Mopti from Timbuktu or Gao Region. Mali reportedly contained 51% of its cases in 2001 and 57% so far in 2002.



VESTERGAARD-FRANDSEN DONATES FILTERS FOR MALI AND GHANA



Mr. Torben Vestergaard Frandsen, director of Vestergaard-Frandsen, has agreed to fabricate and ship free of charge 14,000 conical-shaped nylon filters to Mali and provide 500 square meters of nylon cloth to Ghana. This is Vestergaard-Frandsen's 2003 donation of 3,500 square meters of nylon cloth to the global campaign to eradicate dracunculiasis, and the third such donation, following donations of

3,000 square meters each in November 1998 and June 2000. Thank you Torben!!

IN BRIEF:

Benin reported 37 indigenous cases and 7 imported cases (6 from Togo, 1 from Ghana) in November. This is a reduction of -47% from the 70 indigenous cases that were reported during the unexpected explosive outbreak mainly in the Tchetti area of Benin in November 2001, in common with the simultaneous large outbreak in the nearby village of Kpatala in Togo (see above). It thus seems unlikely that 112 of the 114 cases from that area of Benin in November and December 2001 were contained, as reported, or else the program did not detect all of the cases that were occurring then. In January-November 2002, 146 (93%) of Benin's 157 cases (including 22 imported cases) have reportedly been contained.

MEETING

The 8th Meeting of Program Managers of Guinea Worm Eradication Programs will be held in Kampala, Uganda on April 1-4, 2003.

RECENT PUBLICATIONS

Hopkins DR, Withers PC Jr, 2002. Sudan's war and eradication of dracunculiasis. The Lancet (Supplement) 360 (December): s21-22.

2002 NOBEL PEACE PRIZE



“...The Carter Center has in cooperation with other organizations headed a number of important health campaigns. So far the best results have been achieved in the fight against guinea worm infection...” Statement by Gunnar Berge, Chairman of the Norwegian Nobel Committee in introducing former US President Jimmy Carter, winner of the Nobel Peace Prize for 2002, at the Nobel award ceremony on Oslo, Norway on December 10, 2002.

*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>



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