



Date: November 10, 2003



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

Subject: GUINEA WORM WRAP-UP #137

To: Addressees

STOP GUINEA WORM NOW: Prevent it! Avoid it! Filter it! Report it!

PROGRAM REVIEW FOR FRANCOPHONE COUNTRIES MEETS IN OUAGADOUGOU

Representatives of the remaining endemic francophone countries met in Ouagadougou, Burkina Faso for their annual Program Review on October 20-22, 2003. The Burkinabe Minister of Health, Mr. Alain Yoda opened the meeting. The seven countries concerned have reduced their collective reported cases of dracunculiasis by -37% (from 2,326 to 1,467) and the number of villages reporting one or more cases by -14% (from 478 to 409) during the first nine months of 2003, compared to the same period of last year. As before, nearly one-half (200) of this year's villages that reported one or more cases reported only one case each. Importantly, 80 villages reporting 5 or more cases accounted for 65% of all cases reported. Media coverage of the meeting was very good, and included local newspapers, radio and television, Associated Press, Voice of America, and BBC. The Guinea worm film "Yoro, the Empty Granary" was shown on national television, as were interviews with the national coordinator and a few other participants, and a report of the closing ceremony. A brief sketch of each of the countries' status during January – September 2003 follows (see also Tables 1 and 2).

Togo reported 537 cases (33 of them imported from Ghana) in 125 villages, which is a reduction of -42% in cases. Of the villages reporting one or more cases, 64 reported only one case each and 23 villages reported five or more cases each. 76% of cases were reportedly contained (vs. 62% in 2002). The program reduced cases in the villages where it intervened in 2002 by -68%. The reduction of cases in districts where case containment centers are being used is -59%, vs. -27% reduction in districts without case containment centers. This program intensified its health education during 2003, including more "Worm Weeks", theater, radio, billboards, teaching in schools, town criers, and a rap song. Togo's peak transmission season is October through February.

Mali reported 518 cases from 128 villages, which is a reduction of -6% in cases. Of the villages reporting one or more cases, 52 reported only one case each and 41 villages reported five or more cases each. 52% of cases were reportedly contained (vs. 55% in 2002). The program reduced cases in villages where it intervened in 2002 by -36%. So far in 2003, 90% of cases reported are in the three eastern districts of Gao, Ansongo and Gourma Rharous. The program is improving interventions among the Black Touareg population, which is at highest risk (74% of all cases so far). Mali's peak transmission season is August through October.

Burkina Faso reported 171 cases from 66 villages, which is a reduction of -59% in cases. Of the villages reporting one or more cases, 35 reported only one case each and only 4 villages reported five or more cases each. 58% of cases were reportedly contained (vs. 75% in 2002). The program reduced cases in villages where it intervened in 2002 by -80%. Health education and filter coverage have improved over the past year, and this program could break transmission in 2004. Burkina's peak transmission season is May through October.

Table 1

Program Review: Status of Interventions as of September 30, 2003*

Country	% Change in villages where GWEP intervened 2002	Cases		Villages				
		# Reported	% cases contained	Number endemic	Provided Health Education (IEC)	100% of Households with filters	Protected with Abate	with 1+ source of safe water
Togo	-68%	531	76%	125	100%	81%	82%	43%
Mali	-36%	518	52%	128	100%	100%	14%	23%
Burkina Faso	-80%	171	58%	66	83%	100%	41%	88%
Niger	-10%	164	60%	62	100%	97%	32%	18%
Cote d'Ivoire	-92%	46	45%	11	83%	73%	73%	80%
Benin	-74%	25	100%	11	100%	100%	100%	82%
Mauritania	-82%	9	78%	6	100%	100%	33%	71%
Total	-62%	1464	64%	409	97%	93%	46%	43%

* provisional

Table 2

Program Review: Status of Endemic Villages as of September 30, 2003*

Country	Endemic Villages			# cases (9 months)		% change
	Number	Reported 1 case only	Reported 5+ cases (# cases)	2002	2003	
Togo	125	64	23 (369)	930	537	-42%
Mali	128	52	41 (376)	553	518	-6%
Burkina Faso	66	35	4 (97)	427	171	-59%
Niger	62	37	9 (85)	105	164	43%
Cote d'Ivoire	11	2	2 (20)	192	40	-79%
Benin	11	6	1 (7)	85	25	-71%
Mauritania	6	4	0 (0)	34	9	-74%
Total	409	200	80 (954)	2326	1464	-37%

* provisional

Niger reported 164 cases from 62 villages, which is an increase in cases of 43%. 60% of the cases were reportedly contained, which is the same as in 2002. Of the villages reporting one or more cases, 37 reported only one case each and only nine villages reported five or more cases each. The program reduced cases in villages where it intervened in 2002 by -10%. (Interventions began late in the year in many of these villages. The program only gained access to endemic areas of Tillaberi district, which shares the border and a nomadic population with adjoining districts of Mali and Burkina Faso, in late 2002, because of previous insecurity). Tillaberi District has reported 79% of all Niger's cases so far this year, and 88% of Niger's cases are in Black Touaregs. The peak transmission season is July through November. Niger will hold its national review meeting in Tillaberi on December 9-11.

Cote d'Ivoire reported 40 cases from 11 villages, which is a reduction of -79% in cases. 45% of the cases were reportedly contained, compared to 96% in 2002. Of the villages reporting one or more cases, 2 reported only one case each and only 2 villages reported five or more cases each. The forty cases reported so far are all in government held areas, mostly Tanda (29 cases) and Bondoukou (10 cases) Districts, where UNICEF has recently provided 30 new wells in endemic villages. Unconfirmed rumors of 7 other cases were noted from insecure areas: one from Bouna (October), 5 from M'Bahiakro (October), and one case allegedly exported from Seguela to Burkina Faso in August. The program reduced cases in villages where it intervened in 2002 by -92%. The peak transmission season in Cote d'Ivoire is December-April.

Benin reported 25 cases from 11 villages, which is a reduction of -71% in cases. 100% of cases were reportedly contained (compared to 91% last year), including 17 (68%) who were hospitalized. Of the 11 villages reporting one or more cases, 6 reported only one case each and only 1 village reported five or more cases. The program reduced cases in villages where it intervened in 2002 by -74%. UNICEF has provided safe drinking water sources to the village of Tchetti that reported most of Benin's cases in 2002. This

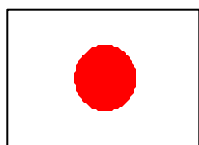
program may break transmission this year: **Benin has reported no indigenous cases in the eight months since January!** Benin's peak transmission season is September through January.

Mauritania reported 9 cases from 6 villages, which is a reduction of -74% in cases. 78% of cases were reportedly contained, compared to 56% contained in 2002. Of the 6 villages reporting one or more cases, 4 reported only one case each, and none reported five or more cases. The program reduced cases in villages where it intervened in 2002 by -82%. This program may break transmission this year. Mauritania's peak transmission season is July through October.

The Recommendations for the seven countries are listed on page 11.

GHANA TIGHTENS INTERVENTIONS, PREPARES SURVEILLANCE IN FORMERLY ENDEMIC AREAS

Ghana's Guinea Worm Eradication Program continues to intensify interventions and surveillance against dracunculiasis. The program has deployed many village volunteers and volunteers from the Ghana Red Cross Society's Women's Clubs who are from the Konkomba ethnic group, which is at highest risk of dracunculiasis. In Kpassa (Nkwanta District of Volta Region), a group of Konkomba village and Red Cross Society volunteer workers have developed a skit to illustrate how Guinea Worm disease is acquired and how it can be prevented. The program plans to videotape this for use more broadly in Konkomba-speaking endemic communities, and it has held meetings with influential "opinion leaders" from Konkomba communities. A press release issued by the ministry of health following the Program Review in Atlanta was broadcast on national radio, and the deputy minister of health was interviewed on CNN. Twenty-three Case Containment Centers are ready to receive patients during the peak transmission season that is just beginning (compared to 10 that began operations late last year), and the program will implement a total of 26 "Worm Weeks" in 2003, compared to 11 in 2002. Three additional U. S. Peace Corps Volunteers are set to join the four who are already working full-time with the program. A cross-border meeting was held on October 31st in Togo between health staff from border districts in the north of the two countries. The program has also scheduled a meeting in early December with representatives of partner agencies to develop specific objectives for its activities in 2004. Evidence that Ghana's program may be starting to see the results of last year's redoubled efforts is illustrated in Figure 1.



The ministry of health and the Community Water and Sanitation Agency of the ministry of works and housing have affirmed their commitment to drill 180 wells funded by the government of Ghana in endemic communities before the end of 2003. The Embassy of Japan provided funding through The Carter Center office in Accra to drill 17 new wells in endemic villages in Nanumba District of Northern Region late in 2001. Those 16 villages reported a total of 126 cases in January-June 2001, and only 36 cases in January-June 2003—a reduction of -71% in two years. Ten of the 16 villages reported no cases in the first half of this year. Two Japanese Overseas Cooperation Volunteers (JOCV) will also start working with Ghana's Guinea worm program soon. To help improve surveillance, the second round of National Immunization Days for polio eradication in early December will include a query about the presence of dracunculiasis in those nationwide village-by-village visits. The surveillance unit in the ministry of health plans to designate a focal person in November to help improve the Community-Based Surveillance System (CBSS), which is based on village volunteers, many of whom began as volunteers for the Guinea Worm Eradication Program, in over 13,000 villages. The CBSS is part of a broader Infectious Disease Surveillance (IDS) initiative in Ghana. The IDS also includes ministry of health personnel in clinics and other health facilities, in addition to the CBSS volunteers. These initiatives are being developed for several reasons, including the urgent need to have adequate surveillance for dracunculiasis in the 95 (of Ghana's 110) districts that have few or no cases of dracunculiasis remaining.

Drs. Ernesto Ruiz-Tiben and Donald Hopkins of The Carter Center visited the Ghana program on October 23-30. They met with the minister of health (Dr. Kwaku Afriyie), the national coordinator (Dr. Andrew Seidu Korkor), the Director of Ghana Health Services, Dr. George Amofa, health officials in Northern and Volta Regions, representatives of several partner agencies in Accra, and also visited endemic villages, case containment centers, sources of drinking water, and district Guinea worm personnel in Tamale, Savelugu, East Gonja and Nanumba Districts of Northern Region and in Nkwanta District of Volta Region. Dr. Elias Sory, Director of Health Services in the Northern Region and his staff briefed the Carter Center delegation and participated in the visit to affected villages.

IN BRIEF:

Ghana has reported a provisional figure for October of 271 cases of dracunculiasis, a reduction of -50% from 539 cases reported in October 2002. October is the first month of the peak transmission season (October to April) in Ghana. This outcome is the first documentation of the impact of the intense interventions implemented by Ghana's GWEP beginning in August 2002. There is great desire and expectation for this trend to continue into the future. CONGRATULATIONS GHANA!!!

Nigeria reported only 32 cases in October, an -87% reduction from the 245 cases reported in October 2002. Through the first ten months Nigeria has reported 1,287 cases, -55% less than the 2,857 reported during the same period in 2003. During June – September the Southeast Zone recorded ZERO cases for four straight months! This is the first time the zone has recorded zero cases, and marks a major milestone in Nigeria's program. Southeast Zone has been the highest endemic area of Nigeria from the beginning of the eradication program. CONGRATULATIONS NIGERIA!!! The peak transmission season in southern Nigeria is October through March.

Togo reported 30 cases in October (including one case imported from Ghana). Compared with 207 cases in October 2002, an 86% reduction. Through October 2003 Togo has reduced its cases of Guinea worm disease by 52%. CONGRATULATIONS TOGO!!!

DRACUNCULIASIS ERADICATION: A POWERFUL ENGINE FOR DEVELOPMENT IN SUDAN

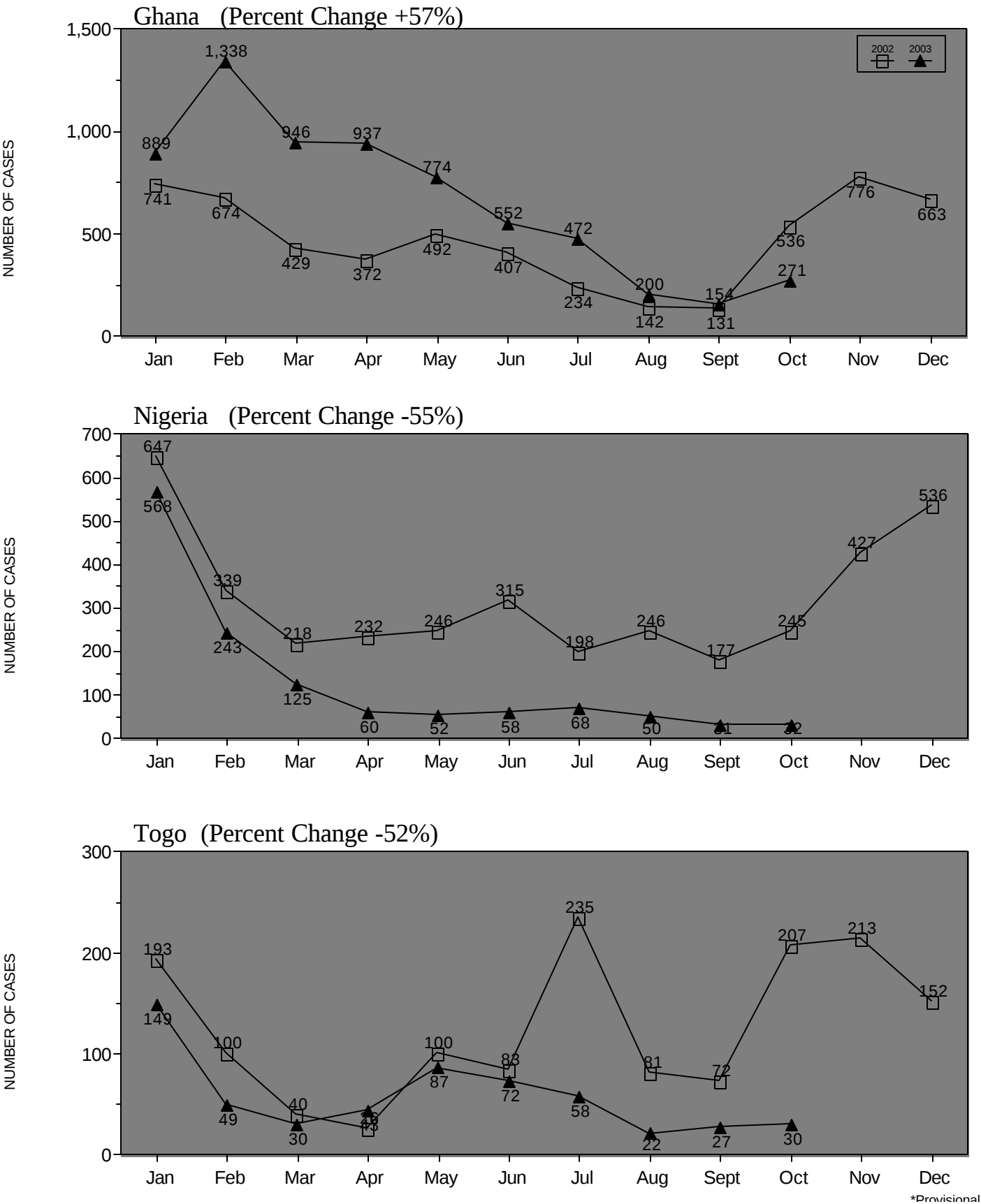
As a peace agreement appears increasingly likely to be reached in Sudan before the end of 2003, that country faces a period of numerous initiatives, all intended to quickly improve the lives and foster development among the Sudanese people. The potential multi-faceted contribution of eradicating dracunculiasis, well beyond getting rid of the final cases of the singular disease itself, should be emphasized for consideration. The process of eradicating dracunculiasis from Sudan, mainly southern Sudan, where more than three quarters of the world's remaining cases are now located, would:

- Improve agricultural production and increase school attendance
- Develop village-based disease surveillance
- Build capacity by screening and training village-based health workers
- Foster organization and functioning of village-based development committees
- Impart on-the-job managerial, planning, supervisory, and monitoring experience
- Promote extension of clean drinking water sources to the most deprived villages
- Provide a tangible, highly visible "Peace Dividend", AND
- **Eradicate dracunculiasis from the last endemic country.**

Meanwhile, Sudan's Guinea Worm Eradication Program continues to achieve record-breaking reductions in the accessible areas of the country (see Figure 3).

Figure 1

NUMBER OF CASES OF DRACUNCULIASIS REPORTED IN GHANA, NIGERIA, AND TOGO*



*Provisional

Table 3

Number of cases contained and number reported by month during 2003*

(Countries arranged in descending order of cases in 2002)

COUNTRIES REPORTING CASES	NUMBER OF CASES CONTAINED / NUMBER OF CASES REPORTED													%
	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL*	CONT.
SUDAN	708 / 1176	362 / 702	544 / 872	519 / 1183	773 / 2254	1223 / 2555	1137 / 2445	1137 / 2261	/	/	/	/	6403 / 13448	48
GHANA	487 / 889	772 / 1338	557 / 946	621 / 937	524 / 774	374 / 552	288 / 472	123 / 200	68 / 154	/	/	/	3814 / 6262	61
NIGERIA	389 / 568	179 / 243	103 / 125	53 / 60	30 / 52	49 / 58	46 / 68	36 / 50	22 / 31	28 / 32	/	/	935 / 1287	73
TOGO	110 / 149	36 / 49	22 / 30	38 / 43	77 / 87	54 / 72	49 / 58	14 / 22	18 / 27	24 / 30	/	/	442 / 567	78
MALI	3 / 3	4 / 4	5 / 5	2 / 3	2 / 3	7 / 8	42 / 85	90 / 158	126 / 249	/	/	/	281 / 518	54
BURKINA FASO	6 / 6	1 / 2	0 / 2	3 / 4	15 / 17	26 / 62	23 / 36	15 / 22	11 / 20	/	/	/	100 / 171	58
NIGER	0 / 0	1 / 1	0 / 0	2 / 2	0 / 0	6 / 6	27 / 37	30 / 47	33 / 71	/	/	/	99 / 164	60
COTE D'IVOIRE	7 / 21	5 / 8	1 / 2	1 / 4	3 / 3	1 / 2	0 / 0	0 / 0	0 / 0	/	/	/	18 / 40	45
BENIN	21 / 21	1 / 1	1 / 1	0 / 0	0 / 0	0 / 0	2 / 2	0 / 0	0 / 0	/	/	/	25 / 25	100
ETHIOPIA	0 / 0	0 / 0	3 / 3	7 / 7	7 / 7	5 / 5	1 / 1	1 / 1	4 / 4	0 / 0	/	/	28 / 28	100
MAURITANIA	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	1 / 1	2 / 3	1 / 1	3 / 4	/	/	/	7 / 9	78
UGANDA	0 / 0	0 / 0	0 / 0	3 / 3	9 / 11	4 / 6	1 / 2	0 / 2	0 / 0	/	/	/	17 / 24	71
KENYA	/	/	/	/	2 / 2	/	/	/	/	/	/	/	2 / 2	100
TOTAL*	1731 / 2833	1361 / 2348	1236 / 1986	1249 / 2246	1442 / 3210	1750 / 3327	1618 / 3209	1447 / 2764	285 / 560	52 / 62	0 / 0	0 / 0	12171 / 22545	54
% CONTAINED	61	58	62	56	45	53	50	52	51	84			54	

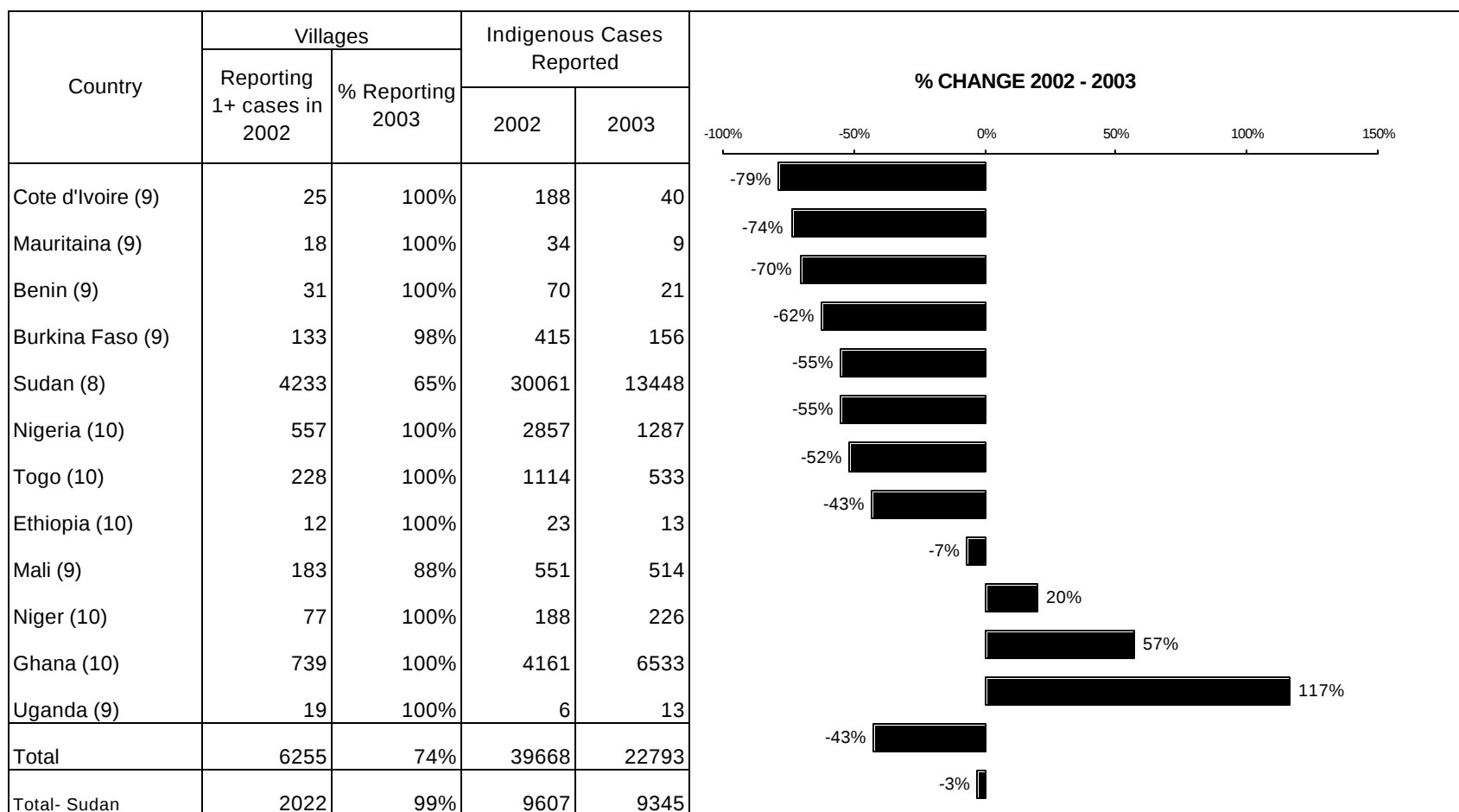
* PROVISIONAL

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

For other imported cases see table of imported cases by month and by country.

Figure 2

Number of Villages/Localities Reporting Cases of Dracunculiasis in 2002, Percentage of Endemic Villages Reporting in 2003*, Number of Indigenous Cases Reported During the Specified Period in 2002 and 2003*, and Percent Change in Cases Reported

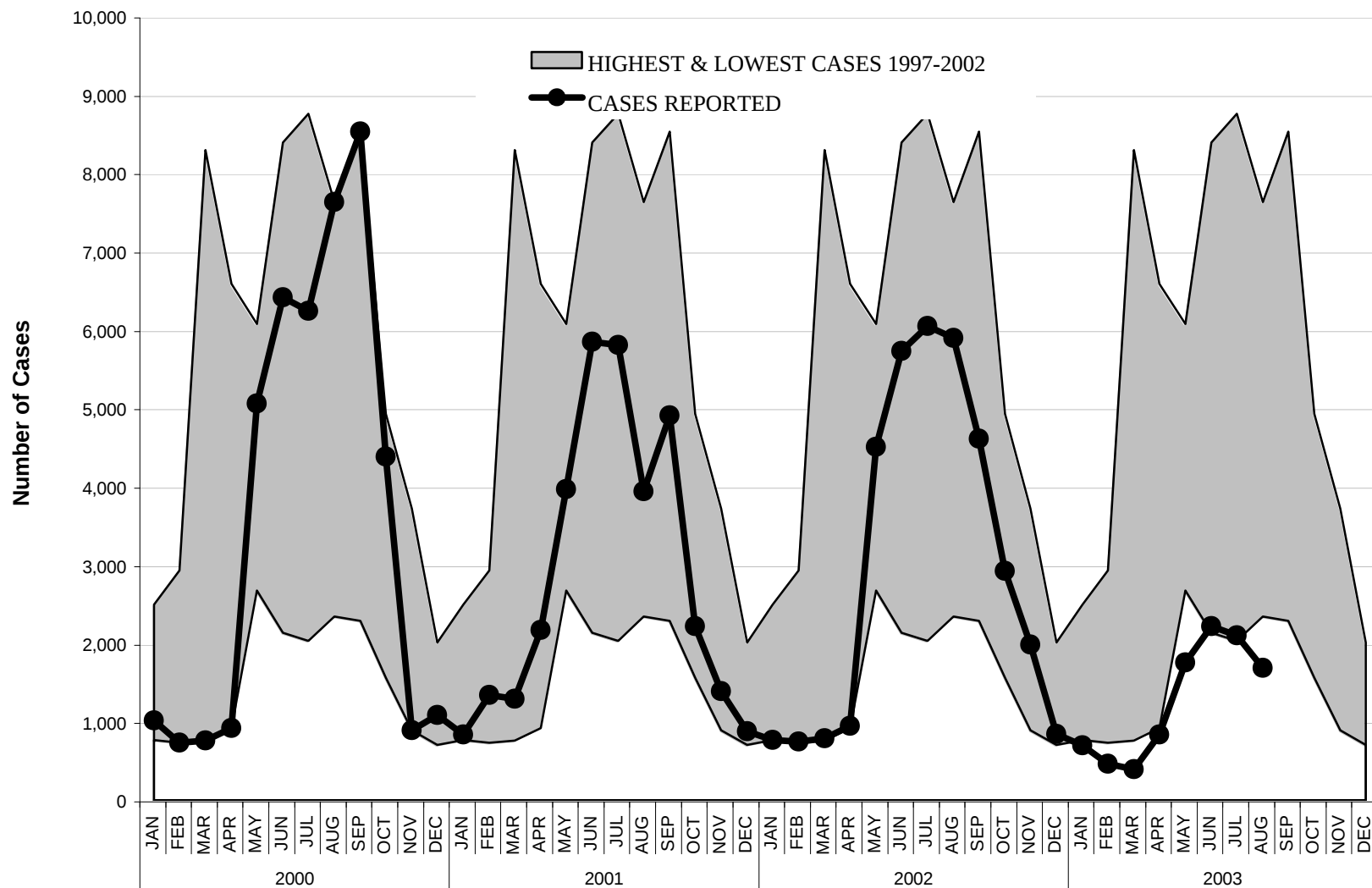


(9) Indicates month for which reports were received, e.g., Jan. - Sept. 2003

* Provisional

Figure 3

**SUDAN GWEP: CASES REPORTED 2000 - 2003 BY YEAR VS HIGHEST & LOWEST
NUMBER OF CASES EVER REPORTED DURING 1997-2002**



DOES YOUR PROGRAM HAVE SPECIFIC MEASURABLE OBJECTIVES FOR 2004?

Every national Guinea Worm Eradication Program should be preparing quantifiable objectives for 2004. To aid in this, the following are draft objectives which may be adapted or modified as appropriate. As indicated, it would also be useful to include the current level of attainment for each objective:

1. Contain >80% of all cases reported (now: xx%)
2. Of cases admitted to Case Containment Centers, admit >75% within 24 hours of emergence of the worm [if available] (now: xx%)
3. Contain >50% of all cases in Case Containment Centers [if available] (now: xx%)
4. Maintain 100% coverage with adequate cloth filters in >95% of endemic villages (now: xx%)
5. Provide pipe filters and appropriate education on their use and care to all eligible populations [if available] (now: xx.%)
6. Monitor provision of adequate functioning sources of safe drinking water in the 20 most endemic communities (now: xx%)
7. Perform spot checks for copepods in # targeted endemic villages each month (now: #)
8. Conduct a Worm Week in each of the highest endemic districts (now: #)
9. Ensure that all primary and secondary schools in the top 20 endemic districts teach about prevention of dracunculiasis (consider using the WHO comic book and teacher's manual) (now: xx%).
10. Ensure radio messages (news, jingles, skits, public service announcements) are broadcast at least twice weekly during the peak transmission season by all available stations in the highest endemic areas of the country (now: frequency)

SIX ENDEMIC COUNTRIES WITH CASE CONTAINMENT CENTERS

Table 4 summarizes data reported so far during 2003 from six endemic countries where Case Containment Centers are being used to help voluntarily isolate and care for persons with dracunculiasis. The documented efficacy of such centers in Togo is mentioned elsewhere in this issue. The two key indices listed in the table track the programs' ability to admit as many of their cases as possible into such centers; and to admit as many of them as possible before or within 24 hours of emergence of the worm. By tracking these two indices, programs can monitor the efficacy of their surveillance (detection of cases early), and their coverage of remaining cases. Programs are urged to monitor not only such averages, but to investigate the reasons why individual patients ("outliers") fall outside of the desired norms, e.g. admission before or within 24 hours of emergence of the worm. Such investigations can help to detect and improve deficiencies. Individual centers should aim to improve their indices each month compared to the previous month.

Table 4

Country	Number of CCCs	Number and % of all cases admitted to CCCs	Number and % of all admissions to CCCs within 24 hrs of worm emergence
Ghana (9)	22	1708 / 6262 27%	1217 / 1708 71%
Nigeria (10)	15	551 / 1287 43%	323 / 402 80%
Togo (10)	11	78 / 537 15%	32 / 78 41%
Mali (9)	1	10 / 521 2%	8 / 8 100%
Burkina Faso (9)	4	95 / 171 56%	54 / 95 57%
Benin (9)	4	17 / 25 68%	9 / 17 53%

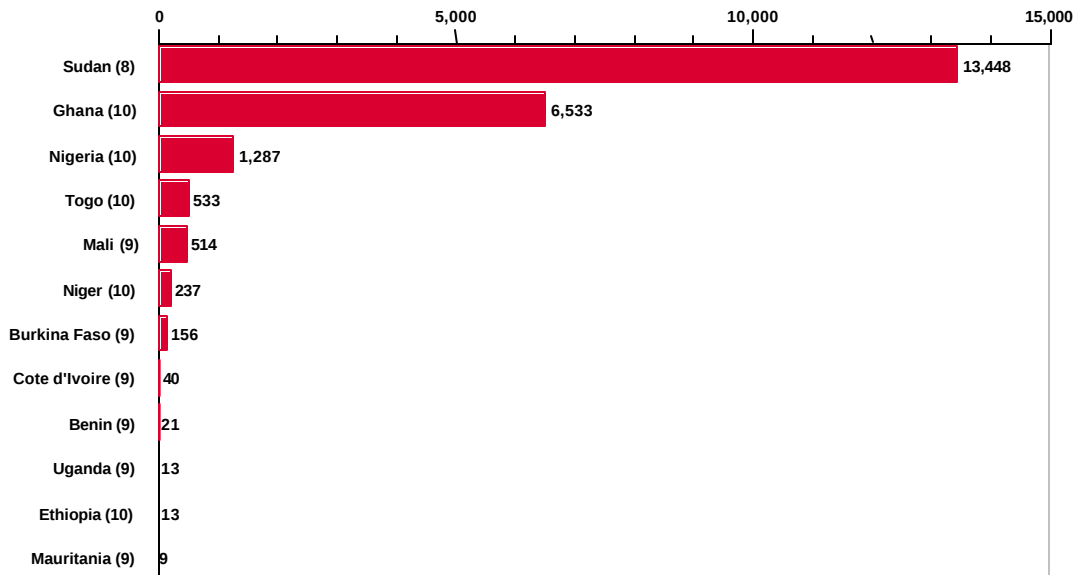
(9) Indicates month for which reports were received, e.g., Jan. - Sept. 2003

ANDERS SEIM WINS NORWAY'S COVETED KARL EVANG AWARD



Norway's Minister of Development Cooperation, Hilde Johnson, presented the Karl Evang Health Education Award to Dr. Anders Seim, founder of Health and Development International (HDI), at a ceremony in Oslo during the annual Karl Evang Seminar on October 20, 2003. This is the first time that the award has been given for work in international health. The award is named for Dr. Karl Evang, Norway's surgeon general for many years, who was one of the public health leaders who helped found the World Health Organization. Dr. Seim announced that he will donate the prize money, 35,000 Norwegian kroner (approximately US\$5,000) to Health and Development International to help Norwegian medical students travel to Sudan in follow up to their successful 2002 Humanitarian Action Campaign (see: Guinea Worm Wrap-Up #136). BRAVO! and CONGRATULATIONS, Anders!!!

Figure 3



Distribution by Country of 22,793 Indigenous Cases of Dracunculiasis Reported During 2003*

PROGRAM REVIEW OF THE DRACUNCULIASIS ERADICATION PROGRAMS IN FRENCH-SPEAKING COUNTRIES

General Recommendations

1. Guinea Worm Eradication Programs (GWEPs) should develop plans of action (for 2004) with measurable and quantifiable objectives as soon as possible and submit these plans to partner organizations (for consideration and funding).
2. GWEPs should ensure that the frequency of active surveillance in endemic villages is in consonance with the first standard for case containment, which requires all cases to be detected within 24 hours of the emergence of a Guinea worm.
3. GWEPs should investigate those communities that report cases anew to determine the true incidence, to confirm whether endemic transmission has re-occurred, and the probable origin of the disease.
4. GWEPs should integrate in their disease surveillance plan those formerly endemic villages that are at high risk of the re-introduction of the disease from nearby endemic villages.
5. GWEPs should seek to obtain the full support of traditional opinion leaders of nomadic population groups for the interventions against the disease, notably the correct use and care of filters and mobilization of their communities to take action against the disease.

Specific Recommendations

Cote d'Ivoire

1. The GWEP should, without fail, conduct searches for cases of dracunculiasis in the formerly endemic districts of Bouna, Dabakala, Mankono, and Vavoua.
2. The GWEP should organize and conduct quarterly meetings with in-country partner organizations.

Mali

1. The GWEP needs to intensify and diversify health education activities in the Bellah (Black Touareg) communities. The type and frequency of modalities used to convey messages to these communities needs to be reported in detail.
2. The GWEP should increase the enrollment of female volunteers in endemic communities/areas.

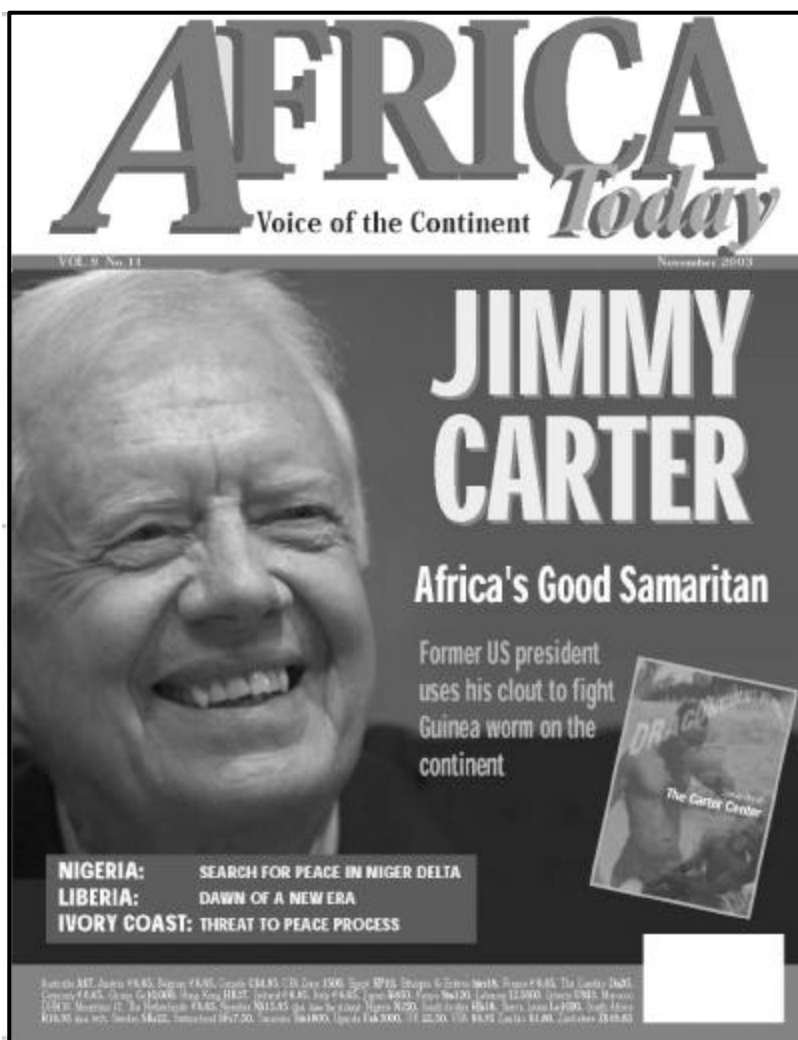
Niger

1. The GWEP should, for operational reasons, utilize the term "endemic localities" in lieu of endemic villages and hamlets/camps.

Togo

1. The GWEP should intensify interventions against dracunculiasis along the borders with neighboring countries, particularly Ghana and Benin, and promote the need for meetings between staff of the GWEPs in villages along the borders.

Partner organizations should continue to provide financial, material, and technical assistance to the GWEPs until certification of the absence of transmission of Guinea worm disease.



RECENT PUBLICATIONS

Africa Today. Nov. 2003. Vol 9 (11):4-5, 17-37.

WHO, 2003. Dracunculiasis eradication: case definition, surveillance and performance indicators. Wkly Epidemiological Rec. 78:348 [corrigendum]

*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 is <http://www.cdc.gov/ncidod/dpd/parasites/guineaworm/default.htm>.



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