



Date: October 3, 2003



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

Subject: GUINEA WORM WRAP-UP #136

To: Addressees

Does Your Program Have Specific Measurable Objectives For 2004?

“Those who say it cannot be done should not interrupt the people doing it.” Chinese proverb

PROGRAM REVIEW FOR GHANA, NIGERIA AND SUDAN HELD IN ATLANTA

More than 70 country representatives, donors, and other international members of the global campaign to eradicate dracunculiasis (Guinea worm disease) participated in the 2003 Program Review for the Guinea Worm Eradication Programs of Ghana, Nigeria and Sudan at The Carter Center on September 22-25. These three countries have reported 96% of all dracunculiasis cases so far in 2003 (Table 1). Former U.S. President Jimmy Carter, former Nigerian Head of State General (Dr.) Yakubu Gowon, and World Health Organization Director-General Dr. Jong-wook Lee led a special summary session to conclude the Review. In an overview of the status of the global campaign at the beginning of the meeting, Dr. Ernesto Ruiz-Tiben of The Carter Center noted that outside of Sudan and Ghana, endemic countries have reduced the number of cases reported so far this year by -46%. Dr. Nevio Zagaria of the World Health Organization announced that eleven more countries will be considered for certification as free of dracunculiasis at the next meeting of the International Commission for the Certification of Dracunculiasis Eradication next March, including Senegal and Yemen. The status of interventions against dracunculiasis in each country is shown in Table 2 and the distribution by country of origin of 66 cases exported to other countries is shown in Figure 6.

The delegation from Ghana was led by Deputy Minister of Health Mr. Moses Dani Baah, and included the national program coordinator Dr. Andrew Seidu Korkor, Northern Region's Regional Director of Health Services Dr. Elias K. Sory, Carter Center (Global 2000) resident technical advisor Mrs. Nwando Diallo, UNICEF/Ghana's project officer (health) Mr. Aliu Bello, and Global 2000 technical advisor Mr. Elvin Hilyer. The Ghanaians described the rapid reduction in cases of dracunculiasis achieved in the first few years after a nationwide search found nearly 180,000 cases in 1989, followed by almost no additional reductions after 8,432 cases were reported in 1994. At present, 6 of the country's 10 regions are Guinea worm-free, except for cases imported from Northern, Brong-Ahafo, Volta or Upper West Regions, where only 15 of the country's 100 districts reported 95% of all cases in 2002. In 536 villages that reported 3,349 cases in January-July 2002, a total of 4,072 cases were reported in the same period of 2003, an increase of 22%, indicating inadequate surveillance and/or control measures in those villages last year.

Ghana has reported 11% of global cases so far this year. The Government of Ghana and its partners have intensified interventions, including mobilization of 6,200 members of Ghana Red Cross Society's Women's Clubs, designation of more than 20 case containment centers, increasing health education in the affected villages (e.g. 24 "Worm Weeks" in 2003 vs. 10 in 2002) and providing more technical and financial support, as well as the Government of Ghana's commitment to provide 180 new borehole wells in endemic communities by the end of 2003. 280,000 pipe filters will be distributed to eligible persons in the top 7 endemic districts beginning in October 2003. Improved detection and reporting of cases has increased Ghana's reported incidence in January-July 2003 by 76% (Figure 4), but the number of cases has already begun to fall in Northern Region's Zabzugu-Tatale District, which reported more cases than any other district in 2002, and was the first to be subjected to the intensified campaign. In Northern Region, which reported 80% of all cases so far this year, the number of cases in August 2003 (150) was only slightly higher than in August 2002 (138), for the first time since May 2002 (Figure 1). The recommendations made to the Ghana program are on page 5.

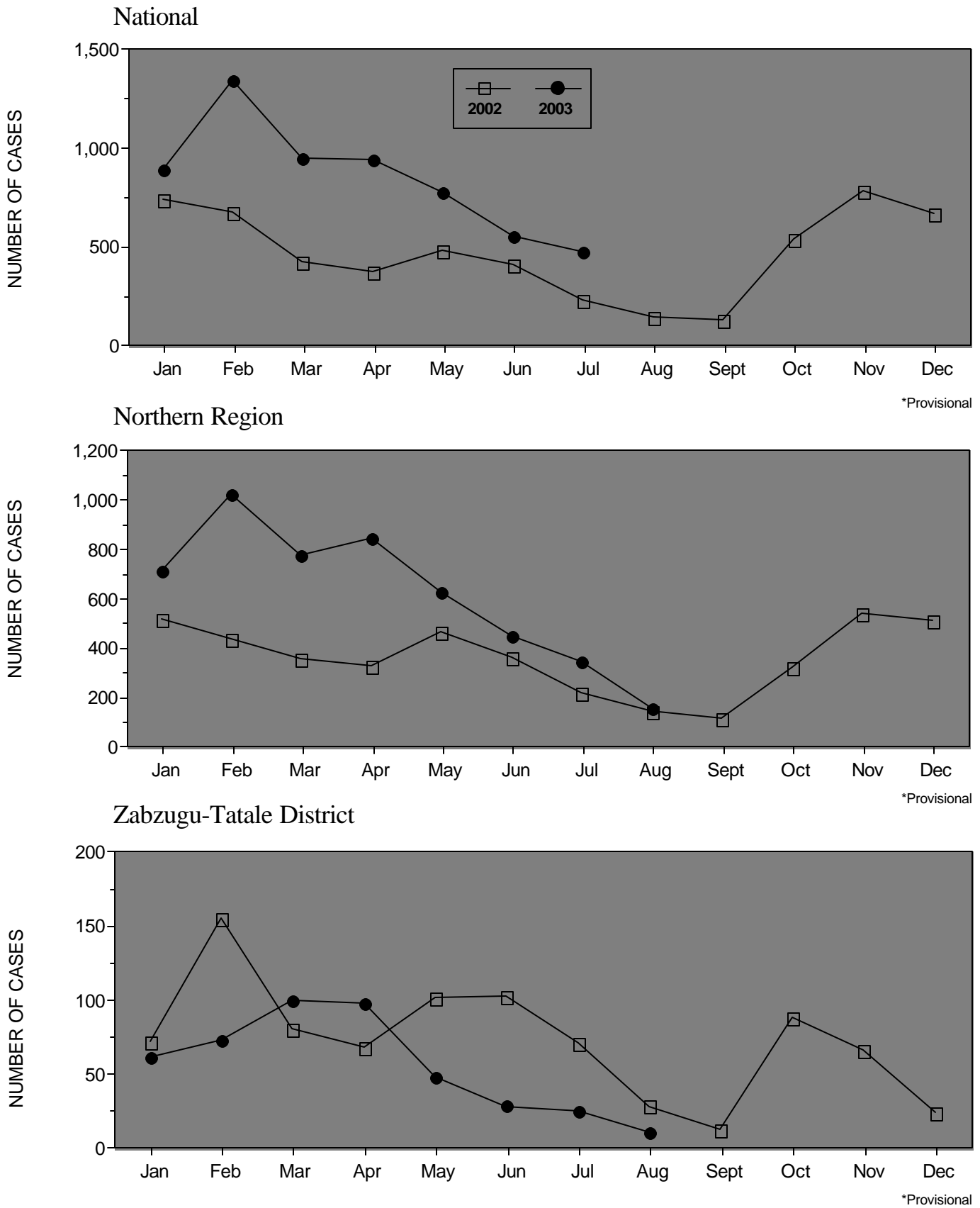
General Dr. Yakubu Gowon led Nigeria's team, which included the national program coordinator Dr. K. A. Ojodu, Carter Center (Global 2000) country representative Dr. Emmanuel Miri, and five Nigerian consultants to the program in the South East (Mrs. Chinyere Maduka), South West (Dr. Joshua Ologe), North Central (Dr. Cephas Ityonzughul), North West (Dr. Jabir Abdullahi) and North East (Mr. Adamu Sallau) Zones. In the first few years after a nationwide search found more than 650,000 cases in 1988, the program rapidly reduced annual incidence of reported cases to about 13,000 cases, which level remained essentially the same between 1996 and 1999. Progress towards eradication resumed dramatically after General Gowon began assisting the program in 1999 (supported by adequate funding from the Bill & Melinda Gates Foundation) by advocating with administrative and health officials in endemic areas on behalf of the program. General Gowon has since made 48 visits to 16 endemic states, 57 Local Government Areas (LGAs), and dozens of endemic villages. At present 20 of Nigeria's 36 states and 717 of the 774 LGAs are Guinea worm-free. Only 1,224 cases of dracunculiasis have been reported nationwide in January-August 2003 (7% of global cases), which is a reduction of -50% from the same period of 2002 (Figure 2). In 464 villages that reported 2,438 cases in January-August 2002, the number of cases was reduced by -64% to 876 cases in the same period of 2003. Interventions have been intensified even more in 2003. The recommendations to the Nigerian program are listed on page 6.

Sudan was represented by senior health and political leaders from both sides of the civil war. The Honorable Minister of Health Dr. Ahmed B. Osman was the lead representative from the Government of Sudan, and Health Commissioner Dr. Achol M. Deng represented the Sudan Peoples Liberation Movement. Participants from Sudan's Guinea Worm Eradication Program included the national program coordinator Dr. Nabil M. Aziz, Dr. Jeremiah Ngondi (data manager), and Carter Center resident technical advisors Mr. Mark Pelletier (Khartoum) and Ms. Kelly Callahan (Nairobi). Sudan reported 76% of global dracunculiasis cases in 2002. Despite the on-going civil war, this program has achieved remarkable progress since the "Guinea Worm Cease-Fire" of 1995, and it is currently accessing more endemic villages (6,490) than ever, including 82% coverage with health education and coverage with household filters in 70% of endemic villages. In 3,412 villages that reported 22,393 cases where the program intervened in January-July 2002, the total number of cases was reduced by -62%, to 8,525 during the same period of 2003. So far in 2003 overall (including cases from newly-accessed villages), the number of cases in January-July has been reduced from 23,619 in January-July 2002 (70% of accessible endemic villages reporting) to 10,855 in the same period of 2003 (65% reporting), for an overall reduction of -54% (Figure 3). The northern states of Sudan, which reported 60 indigenous cases in all of 2002, including 36 indigenous cases in January-August, reported only 4 indigenous cases in January-August 2003, for a reduction of -89%. In southern Sudan, the two emphasis states of Lakes and Western Equatoria have provisionally reported substantial reductions in cases of -74% (54% and 56% reporting in the two years) and -56% (82% and 49% reporting) respectively for the period January-July. Participants at the Review also discussed strategies and plans for combating dracunculiasis in Sudan after the civil war ends. The recommendations to the Sudan program are listed on page 7.

The purposes of this year's Program Review for these three highest endemic countries remaining were to strengthen the technical effectiveness, political will, and financial support for each program, and to enhance public awareness of the campaign in the three countries and abroad. The special summary session that concluded the review allowed key allies to see and hear abbreviated first hand accounts of the status of the global dracunculiasis eradication campaign, of the national Guinea Worm Eradication Programs, the nature of the challenges remaining in each country, and how those challenges are being addressed. This session began with a showing of the Public Service Announcement video that was recorded by United Nations Secretary-General Kofi Annan. Other participants in addition to those already mentioned included the deputy executive director of UNICEF, several representatives from CDC, five representatives of the government of Japan, BASF, the Canadian International Development Agency, the government of the United States, Bill & Melinda Gates Foundation, Saudi Fund for Development, Vestergaard Frandsen, and The World Bank. Media representatives included *Africa Today*, Associated Press, *Atlanta Journal and Constitution*, and Voice of America. General Gowon taped additional Public Service Announcements for broadcast by the Voice of America and local radio stations. The delegations from Ghana and Nigeria prepared press releases for distribution after they return home. President Carter was also interviewed recently by the British Broadcasting Corporation (BBC) and the Voice of America (already aired several times), as part of the new public awareness campaign. CNN International also broadcast a story on this program review which included interviews with President Carter, General Gowon and Mr. Baah.

Figure 1

GHANA GUINEA WORM ERADICATION PROGRAM NUMBER OF CASES OF DRACUNCULIASIS REPORTED BY YEAR: 2002 - 2003*

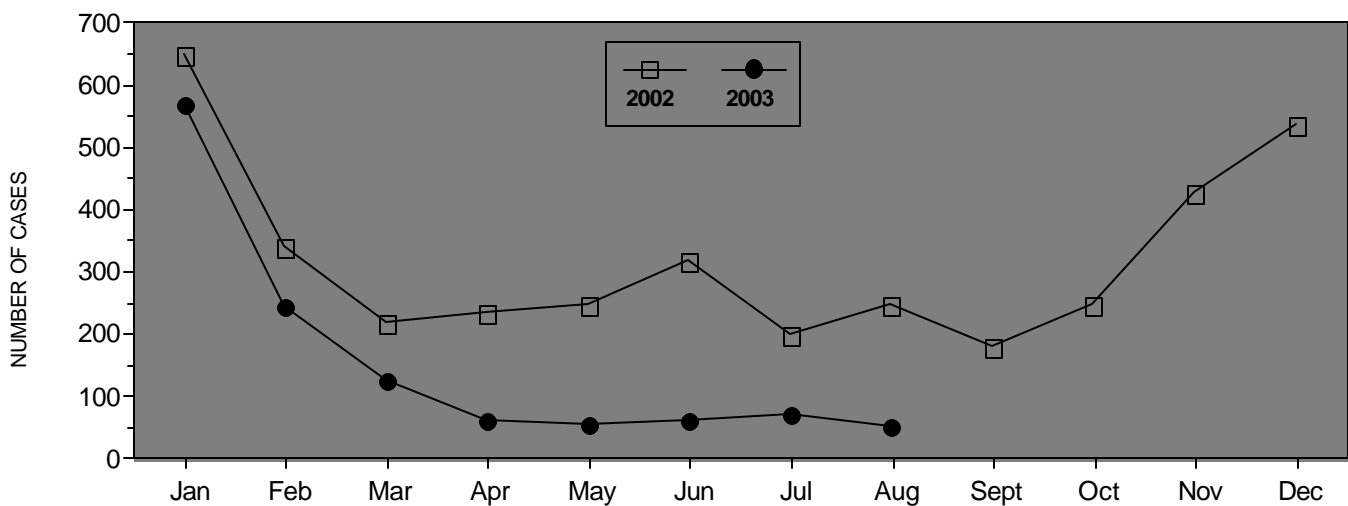


Ghana's Challenge to Nigeria for 2005:

At the Closing Ceremony of the Program Review in Atlanta on September 25th Ghana's Deputy Minister of Health, Mr. Moses Dani Baah, challenged Nigeria to see which of their two countries would report the most months with zero incidence of dracunculiasis in 2005.

Figure 2

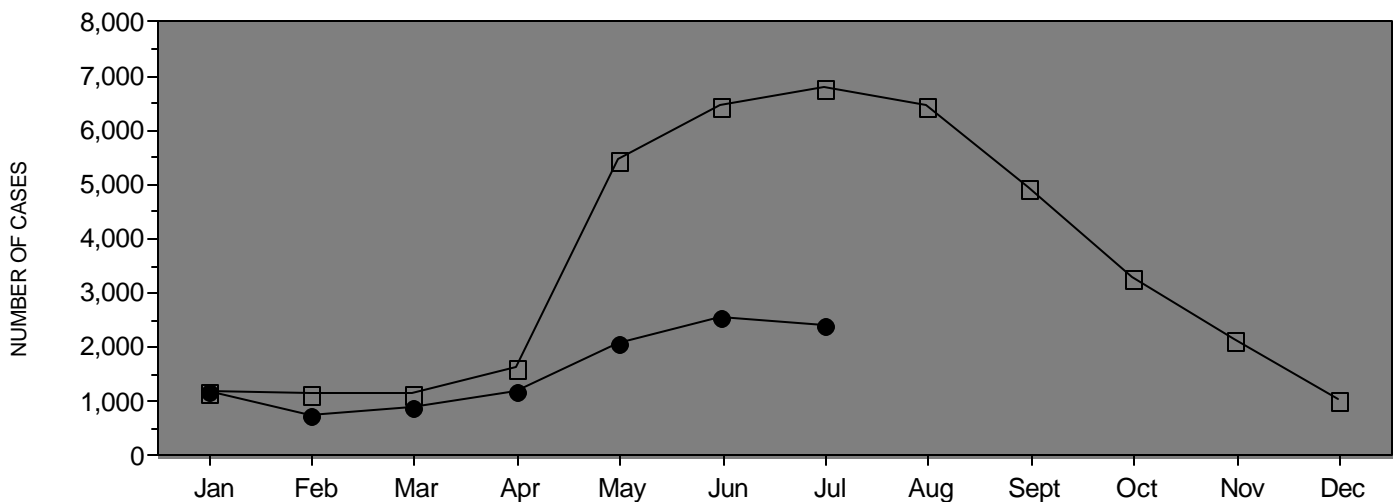
NIGERIA GUINEA WORM ERADICATION PROGRAM NUMBER OF CASES OF DRACUNCULIASIS REPORTED BY YEAR: 2002 - 2003*



*Provisional

Figure 3

SUDAN GUINEA WORM ERADICATION PROGRAM NUMBER OF CASES OF DRACUNCULIASIS REPORTED BY YEAR: 2002 - 2003*



*Provisional

RECOMMENDATIONS FOR GHANA

1. Ghanaian authorities should make clear to all concerned that eradicating guinea worm disease from Ghana is a top national priority for which they will all be held responsible.
2. The Ghana GWEP should provide a detailed plan of action with specific objectives and measurable goals for 2004 with emphasis on the expectations in water supply; Abate application; social mobilization/health education; surveillance; filter coverage and case containment.
3. Ghana's GWEP should continue to extend its commendable efforts (such as involvement of the Ghanaian Red Cross Society) to effectively engage more women in its activities at all levels.
4. The Ghana GWEP should seek to increase the participation of leaders and members of ethnic groups with above-average incidence of dracunculiasis in the activities of the program.
5. Ghana's health authorities should support national leadership of the Community Based Surveillance System so that that system can routinely conduct effective surveillance for GWD in non-endemic areas, maintain rumor registers, and ensure follow up of suspected cases of GWD in those areas, while also conducting surveillance for other diseases.
6. The Ghana GWEP should seek to ensure education about Guinea worm prevention in schools, churches, and mosques in the remaining endemic areas not yet covered, and improve on its performance in areas currently covered.
7. The Ghana GWEP should improve on the current quality of documentation on Abate application. The quality and effectiveness of this strategy should also be maintained through monthly spot checks of copepods in targeted ponds. Treatment should be carried out every four weeks.
8. The Ghana GWEP should improve on the documentation of the operations of the case containment centers, particularly on the time lapse between worm emergence and admission; proportion of cases admitted within 24-hours; analysis of costs and the efficacy and acceptability of the scheme.
9. The Ghana GWEP should accelerate the recruitment of appropriate persons for effective advocacy and health education among the high-risk ethnic groups.
10. The Ghana GWEP should avoid placing undue emphasis on the problems of at-risk villages, but rather, concentrate on implementing all necessary interventions in all the known endemic villages. This will be the surest way of reducing/eliminating the dangers to non-endemic villages which are currently at-risk.
11. The planned National Immunization Days (NIDs) in Ghana for 2003 and 2004 should be maximally utilized for national active case searches on guinea worm disease in the country.
12. The Ghana GWEP should emphasize both the quality and quantity of supervisors at all levels.
13. The Ghana GWEP should ensure effective coordination of all water supply plans for the country by developing a comprehensive action plan, which should be agreed to by all relevant agencies/partners. This coordination should deal with all relevant issues, including the prioritization and selection of endemic villages to be served, by which agency and when.
14. The Ghana GWEP should monitor and report monthly the provision and maintenance of safe water sources by all water providers including those of government to all priority endemic villages. This monthly progress report should be fed back to all partners and should be related to the over-all plan agreed upon. The Northern Region should be the focus for water supply in 2004.

15. The Ghana GWEP should investigate why some areas reported as having very high percentages of implementation of key interventions in 2002 are reporting high increases of cases in 2003.
16. The Ghana GWEP should use Health Mapper to identify formerly endemic villages that are receptive to transmission of Guinea worm disease and place all such villages under monthly surveillance and reporting through the Community Based Surveillance System.

RECOMMENDATIONS FOR NIGERIA

1. Acknowledging the unique and effective role of former Nigerian head of state General (Dr.) Yakubu Gowon and their partners for the accelerated progress towards eradication of Guinea worm disease in Nigeria, NIGEP should continue to provide every support to ensure continued advocacy and community mobilization.
2. Nigeria's Federal Ministry of Health is urged to give priority attention and support, in collaboration with appropriate state and local authorities, WHO "state officers", and other partners, to establishing effective surveillance for cases of Guinea worm disease in areas considered to be non-endemic. Such surveillance is of critical importance for rapid completion of the program through early discovery of recurrences that may otherwise lead to serious outbreaks and is essential if Nigeria is to be certified free of dracunculiasis.
3. Nigeria's Federal Government needs to begin providing support for NIGEP's data management as the program rapidly increases the areas that are no longer endemic for Guinea worm. Neglecting these areas now will make it much more expensive to subsequently implement data collection and management. NIGEP will need this capability in order to assure that Nigeria can be certified eventually as free of Guinea worm disease.
4. NIGEP should continue to monitor monthly and prioritize the provision and rehabilitation of drinking water sources to the highest endemic villages, including the use of appropriate low-cost technologies.
5. NIGEP should continue to monitor the efficacy and acceptability of Case Containment Centers for the care and isolation of persons with Guinea worm disease.
6. NIGEP's national Steering Committee should meet at least quarterly, in order to facilitate coordination of efforts in the program
7. The Federal Government of Nigeria is urged to ensure the prompt clearance of materials for the Guinea Worm Eradication Program from national ports of entry.
8. The Federal Government of Nigeria is encouraged to facilitate the timely release of approved funding for activities at federal, state and local levels. The one-year incubation period for Guinea worm disease makes funding delays especially harmful.
9. NIGEP should develop a plan for a smooth transition to the pre-certification phase.
10. The heads of The Carter Center, WHO and UNICEF should write a joint letter to the Federal Government of Nigeria emphasizing the need for expeditious implementation of surveillance and data management under government auspices, timely release of approved funds, and prompt clearance of Guinea Worm Eradication Program materials from national ports of entry.

RECOMMENDATIONS FOR SUDAN

1. Participants in this Guinea worm review meeting appeal for a successful conclusion before the end of 2003 to the current negotiations to settle the conflict in Sudan. Sudan reported 76% of all dracunculiasis (Guinea worm) cases in the world and exported cases to at least three neighboring countries in 2002. Ending the 20-year-old war would remove the single greatest barrier to completing the global campaign to eradicate dracunculiasis.
2. Participants commend Sudanese health workers, political authorities, and their partners on both sides of the civil war for the significant reductions in dracunculiasis cases already achieved in many areas that are currently accessible to the program. This effective cooperation should continue into the post-war period.
3. The Sudan Guinea Worm Eradication Program (GWEP) should continue to prepare to implement its strategy to give priority in the immediate post-war period to identifying remaining areas of highest endemicity, and to initiating control measures immediately as soon as such areas become accessible and in the areas most likely to export cases to neighboring countries.
4. The Sudan GWEP should continue to educate Internally Displaced Persons about transmission and prevention of Guinea worm disease as rapidly as possible in anticipation of their possible return to their homes soon.
5. The Sudan GWEP should seek to hold a National Guinea Worm Eradication Day as soon as possible after a peace agreement is reached, with a joint visit to one or more endemic areas by the highest leaders from both sides of the conflict. This would help to establish the urgency of implementing Guinea worm eradication activities among the post-war development priorities in Sudan.
6. Sudan should assess whether the frequency of supervision is adequate and set standards for supervision and size of geographical areas to be served that allow the desirable frequency of visits to endemic areas.
7. Given that peace is near for Sudan, it is recommended that UNICEF Headquarters take up the role of contracting with the concerned parties, including the Water Secretariat and Health Secretariat of the Sudan People's Liberation Movement (SPLM), to work out modalities for how best clean water can be made available to persons in war-torn Sudan.
8. Sudan should review the calculations for the "safe water" indicator of progress to determine if the increases noted in almost all presentations are valid increases in the availability of safe drinking water.
9. Filter coverage should be increased in Bahr Al Jabal (reported 85% of cases in Equatoria Zone in 2003).
10. The impact of case containment shelters should be assessed when epidemiologically appropriate by comparing new cases in villages with case containment shelters with new cases in villages without such shelters. Do they make a difference?
11. Begin reporting in Operation Lifeline Sudan (OLS) areas the number of villages under case containment and the number of villages under case management so as to have an indicator over time of the progress toward case containment.
12. Continue active surveillance throughout 2004 and 2005 in all the endemic villages of the Northern states that are endemic in 2003.

Table 1

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													CONT.	%
	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL*		
SUDAN	708 / 1176	362 / 702	544 / 872	519 / 1145	630 / 2054	1212 / 2528	1467 / 2378	/	/	/	/	/	5442 / 10855	50	
GHANA	487 / 889	772 / 1338	557 / 946	621 / 937	524 / 774	374 / 552	288 / 472	123 / 200	/	/	/	/	3746 / 6108	61	
NIGERIA	389 / 568	179 / 243	103 / 125	53 / 60	30 / 52	49 / 58	46 / 68	36 / 50	/	/	/	/	885 / 1224	72	
TOGO	110 / 149	36 / 49	22 / 30	38 / 43	77 / 87	54 / 72	49 / 58	14 / 22	/	/	/	/	400 / 510	78	
MALI	3 / 3	4 / 4	5 / 5	2 / 3	2 / 3	7 / 8	42 / 84	90 / 158	/	/	/	/	155 / 268	58	
BURKINA FASO	6 / 6	3 / 4	0 / 1	3 / 4	15 / 17	26 / 65	22 / 37	13 / 18	/	/	/	/	88 / 152	58	
NIGER	0 / 0	1 / 1	0 / 0	2 / 2	0 / 0	6 / 6	27 / 37	30 / 47	/	/	/	/	66 / 93	71	
COTE D'IVOIRE	7 / 21	5 / 8	1 / 2	1 / 3	4 / 4	1 / 1	0 / 0	0 / 0	/	/	/	/	19 / 39	49	
BENIN	21 / 21	1 / 1	1 / 1	0 / 0	0 / 0	0 / 0	2 / 2	0 / 0	/	/	/	/	25 / 25	100	
ETHIOPIA	0 / 0	0 / 0	3 / 3	7 / 7	7 / 7	5 / 5	1 / 1	1 / 1	/	/	/	/	24 / 24	100	
MAURITANIA	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	1 / 1	2 / 3	1 / 1	/	/	/	/	4 / 5	80	
UGANDA	0 / 0	0 / 0	0 / 0	3 / 3	9 / 11	5 / 6	2 / 2	0 / 0	/	/	/	/	19 / 22	86	
TOTAL*	1731 / 2833	1363 / 2350	1236 / 1985	1249 / 2207	1298 / 3009	1740 / 3302	1948 / 3142	308 / 497	0 / 0	0 / 0	0 / 0	0 / 0	10873 / 19325	56	
% CONTAINED	61	58	62	57	43	53	62	62					56		

* 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.

Table 2

Number of indigenous dracunculiasis cases*, percentage of cases contained[†], and number and percentage of villages with endemic disease[§], by country and intervention, 2003[^]

Country	Cases		Villages					
	No. indigenous cases reported	% cases contained	# reported with endemic disease	% reporting monthly	% with filters in all households	% using Abate®	% with 1+ sources of safe water	% provided health education
Sudan (7)	10,855	50	6,490	65	70	2	57	82
Ghana (8)	6,108	61	1,114	100	95	33	45	100
Nigeria (8)	1,224	72	596	100	99	42	66	100
Togo (8)	495	78	244	100	94	83	46	100
Mali (8)**	264	58	218	100	90	4	16	100
Burkina Faso (8)	140	58	48	94	76	49	91	88
Niger (8)	90	71	91	100	100	26	22	100
Côte d'Ivoire (8)	39	49	29	100	100	24	97	100
Benin (8)	19	100	26	100	100	100	100	100
Uganda (8)	13	86	20	100	68	100	75	100
Ethiopia (8)	12	100	11	100	78	100	36	100
Mauritania (8)	5	80	20	99	100	0	79	100

* The first occurrence in a person, during the calendar year, of a skin lesion with a Guinea worm protruding through that lesion.

† A case of dracunculiasis is classified as contained if three conditions are met: 1) the infected person is detected within 24 hours of the emergence of the Guinea worm through the skin, 2) actions (i.e., occlusive bandages, counseling, and care of the patient until the person from contaminating sources of drinking water, and 3) these two conditions are confirmed by a supervisor within 7 days of occurrence.

§ As of month of last report.

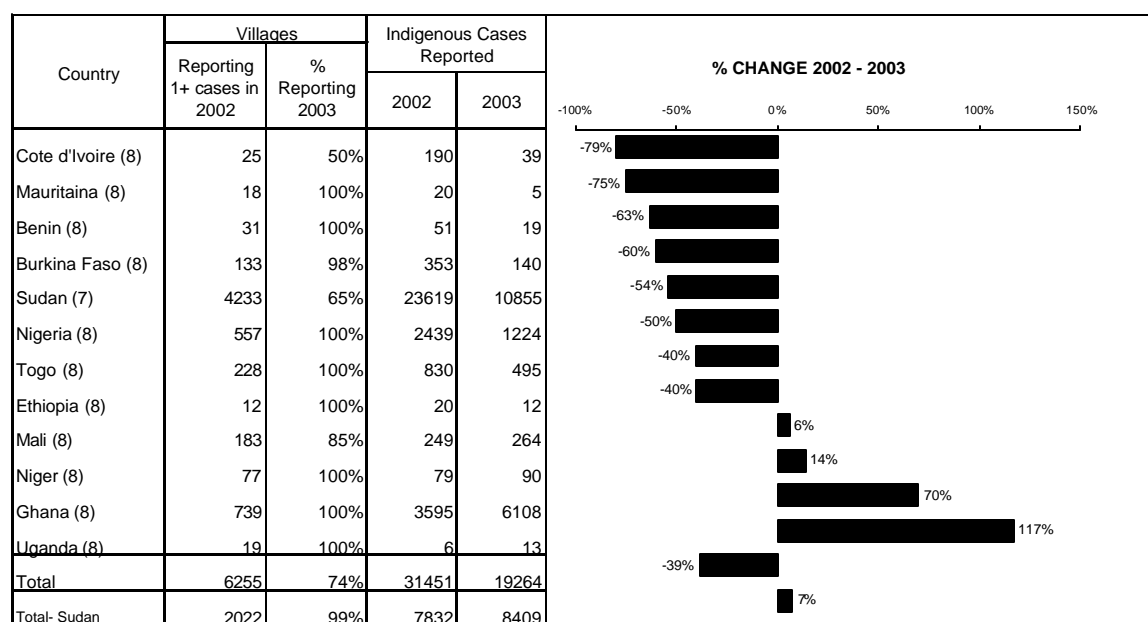
^ Provisional.

** Interventions for Ansongo, Gao, and Gurma Rharous districts.

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

Figure 4

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



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

* Provisional

Togo conducted Worm Weeks in 6 villages in Bassar District and in the village of Djarapanga (Sotouboua District) in July, in some villages of Ogou District in August, and Keran District on September 8-12. In January-August 2003, the percentage reduction in dracunculiasis cases in 5 Togolese districts served by Case Containment Centers was -59% compared to the same period 2002. In 6 districts without Case Containment Centers, cases were reduced by -31% during the same eight months.

Uganda All 13 indigenous cases reported in Uganda in January-August have occurred in the same village: IIIa/Nawuapoet, in Rikitae Parish of Kotido District. Whereas the male to female ratio of indigenous cases is 4:9, it is 8:1 for cases imported from Sudan. Insecurity and importations are still the main challenges for this program.

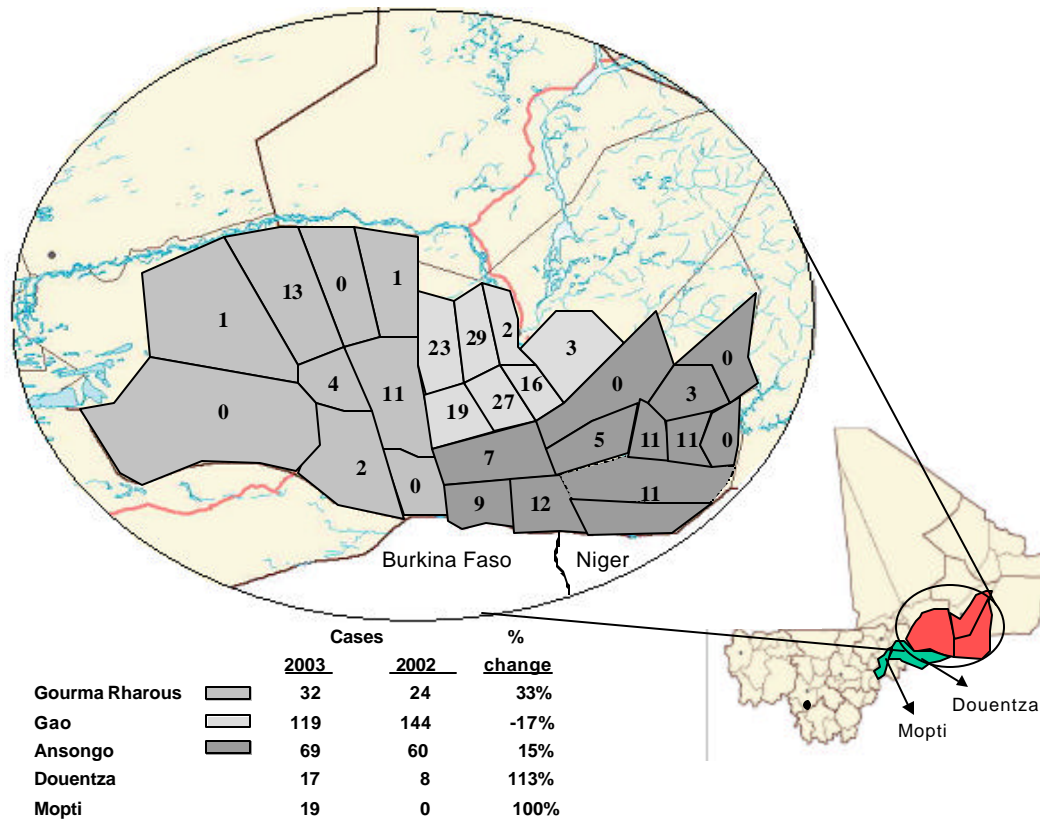
Mali has reported 264 cases of dracunculiasis during January-August 2003, a 6% increase from the 249 cases reported during the same months in 2002. The map below shows the distribution of cases by "Cercles" so far during 2003. The total number of cases reported from these "Cercles" during January - August 2002 and 2003, and the percentage change is also shown in figure 5.

The 48th Meeting of the Interagency Coordinating Groups for Dracunculiasis Eradication, and an ad hoc meeting of the Gates Guinea Worm Grant Committee also met at The Carter Center on September 25, 2003.

An unfortunate editing error in the WHO Weekly Epidemiological Record article "Dracunculiasis Eradication: case definition, surveillance and performance indicators" rendered incorrect a statement about actions to be taken in villages that contain only imported case(s). The correct statement is that "Since November 2001, all endemic countries have been encouraged to investigate all imported cases to determine their probable origin, and NOT to automatically designate villages with imported cases as endemic without evidence of disease transmission."

Figure 5

Mali Dracunculiasis Eradication Program Endemic Districts of Gourma Rharous, Gao, and Ansongo, Jan. – Aug. 2003



KUWAIT FUND SUPPORTS GUINEA WORM ERADICATION



The Kuwait Fund for Arab Economic Development informed The Carter Center in late September that it would provide a grant of US \$500,000 to support the center's Guinea worm eradication work over two years (2004-2005). These funds will be used to support aspects of the program in all of the remaining endemic countries. In 1997, the Kuwait Fund made a grant of \$250,000 to The Carter Center via the World Bank Trust Fund for Guinea Worm Eradication.

NORWEGIAN MEDICAL STUDENTS RAISE \$208,000 FOR SUDAN'S GWEP



MedHum 2003

In an outstanding Humanitarian Action Campaign that was well-timed to coincide with epidemiological and political developments in Sudan, medical students from the four Norwegian medical schools at the Universities of Bergen, Oslo, Tromsø and Trondheim raised the equivalent of US\$208,000 for the purchase of over 7,000 medical kits to provide medical care for persons with Guinea worm disease in Sudan. The medical kits will be distributed before the 2004 peak transmission season as an important element of escalated interventions against the disease in the war-torn country. The students held or sponsored concerts, dances, raffles, comedy shows,

skits, cabarets, sold waffles, showed movies about Africa, staffed "teddy bear hospitals" where children could bring their teddy bears for "treatment", and solicited funds door to door. The students' campaign was supported by the Norwegian Medical Association, the minister of health of Norway, former Olympic ice skater Dr. Johan Olav Koss, and Health and Development International. The overall chair of the campaign was Ms. Ingrid Sommer (Oslo). Other campaign leaders were Ms. Inga Strand (Bergen), Mr. Anders Mjelle (Tromsø) and Ms. Sigrid Aadnoy (Trondheim). *BRAVO, Norway!!!!*

CDC SUPPORTS GUINEA WORM DISEASE ERADICATION EFFORT



The Centers for Disease Control and Prevention (CDC) and The Carter Center signed a cooperative agreement in September 2003 that awards \$95,000 annually for up to 5 years to The Carter Center for "Surveillance and Eradication in the Global Guinea Worm Eradication Effort". This support will be used to provide technical assistance to national Guinea worm eradication programs to plan and implement activities that will improve the capacity for surveillance of cases of Guinea worm disease in areas now free of disease transmission.

ANOTHER DONATION BY VESTERGAARD FRANDBSEN



global campaign. Thank you Torben!!

On September 10, 2003, Torben Vestergaard Frandsen, Director of Development, Vestergaard Frandsen Group, announced to The Carter Center an in-kind donation of filter cloth and shipping costs totaling US \$12,000 for use in the campaign to eradicate dracunculiasis. This is the fourth annual donation by the Vestergaard Frandsen Group to The Carter Center for the

RECENT PUBLICATIONS

CDC, 2003. Progress toward global eradication of dracunculiasis, January-June 2003. MMWR 52:881-883.

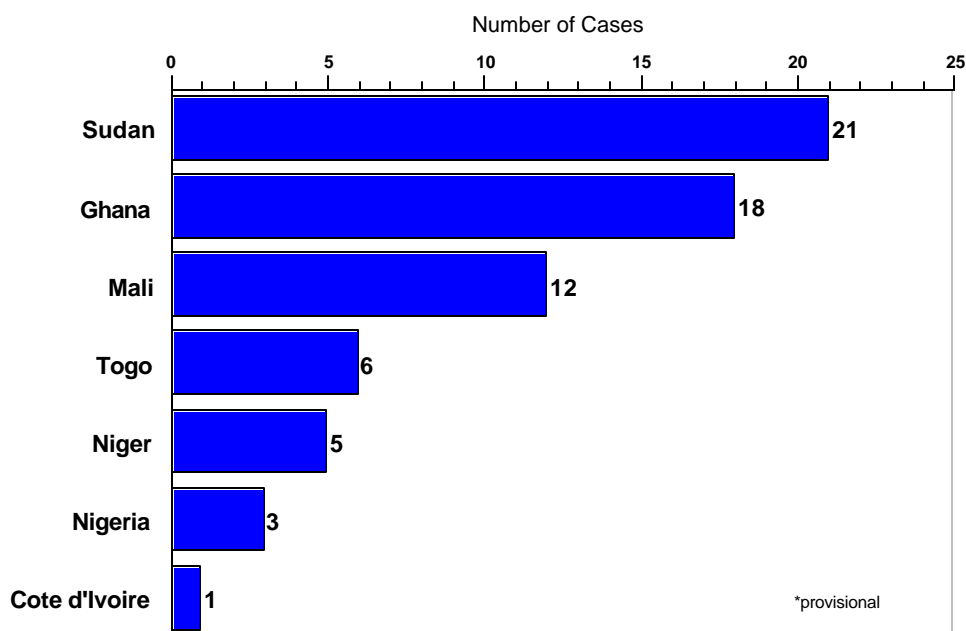
WHO, 2003. Assessment of the community based surveillance system in Ghana and its role in dracunculiasis eradication. Wkly Epidemiol Rec. 78:321-323.

WHO, 2003. Dracunculiasis eradication: case definition, surveillance and performance indicators. Wkly Epidemiol Rec 78:323-328.

Mjelle, A., 2003. Kamp mot guineaorm blant livsglade afrikanere. The Journal of the Norwegian Medical Association 11 (123):1156 –1158

Figure 6

Distribution by Country of Origin of 66 Cases of Dracunculiasis Exported to Other Countries During 2003*



*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.