



Date: February 23, 2004

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

Subject: GUINEA WORM WRAP-UP #140

To: Addressees

Are you and Your Program Detecting All Cases Within 24 Hours?**CARTER IS JOINED BY DR LEE OF WHO AND GAUTAM OF UNICEF IN HISTORIC VISIT TO GHANA; HE VISITS TOGO AND MALI ALSO****THE
CARTER CENTER**

Former U.S. President and Mrs. Jimmy Carter visited Togo, Ghana and Mali during February 2-8, 2004 on behalf of The Carter Center. The visits were part of the Center's stepped up advocacy campaign ("Stop Guinea Worm Now!") for completing the eradication of Guinea worm disease. WHO Director-General Dr. Jong-wook Lee and UNICEF Deputy Executive Director Mr. Kul Gautam joined the chairman of The Carter Center in the visit to Ghana, which reported 8,285 cases of dracunculiasis in 2003 (only Sudan reported more), and is now the highest endemic country remaining in West Africa. In Ghana, the distinguished visitors flew with the Honorable Minister of Health Dr. Kwaku Afriyie to Tamale, the capital of the Northern Region, where they made a field visit to the endemic village of Dashei, in East Gonja District, met with over 200 Guinea worm workers and political leaders from all of the endemic regions and representatives of key partner and donor agencies, and held a press conference. The minister said that Ghana would do more to raise public awareness about the disease and gain a sense of urgency at all levels. Later in Accra, Drs. Lee and Gautam joined President and Mrs. Carter in a visit to President John Kufuor. President Kufuor pledged his government's enthusiastic support, stated his intention to make the program a top priority, and indicated that he would try to visit the endemic area in Nkwanta District of Volta Region in order to show that this is a priority. President Carter was accompanied by Carter Center Executive Director, Dr. John Hardman, and by the Technical Director of The Carter Center's Guinea Worm Eradication Program, Dr. Ernesto Ruiz-Tiben. Dr. Lee was accompanied by Dr. Anarfi Asamoah-Baah, WHO's Assistant Director-General for communicable diseases.

In Togo, President Carter and his team met with President Gnassingbe Eyadema, the Honorable Minister of Health, Ms. Suzanne Aho, as well as with leaders of Togo's Guinea Worm Eradication Program, other political leaders and representatives of donors and partner agencies. President Eyadema pledged his full support for the program. President Carter and Minister of Health Ms. Suzanne Aho also held a press conference shortly before President Carter departed to fly to Ghana. At his final stop, in Mali, President Carter met with President Amadou Toumani Toure, who expressed his disappointment that Mali's program has not progressed faster. He promised to lend more personal support, including a visit to Gao Region.

Throughout his trip, President Carter stressed the need to intensify efforts at all levels in order to eradicate the final 1% of cases that remain (from an estimated 3.5 million cases when The Carter Center took up this cause in 1986, to less than 35,000 cases reported in 2003). The presidents of all three countries promised to videotape additional Public Service Announcements that can be broadcast in association with the message by UN Secretary-General Kofi Annan, to help increase awareness of their Guinea worm programs. President Carter's visits received extensive coverage in the international press, including Panafrican News Agency, *Agence France Presse*, *Atlanta Journal and Constitution*, British Broadcasting Corporation, Voice of America, *Africa Today*, *Insider Weekly*, *Associated Press*, *COX news* and *Emory Magazine*, as well as numerous local media outlets, especially in Ghana and Togo (seven radio stations in Ghana, for example).

GHANA DOCUMENTS IMPACT OF RED CROSS SOCIETY MOTHERS CLUBS

Ghana's Guinea Worm Eradication Program began working with the Ghana Red Cross Society's (GRCS) Mothers Clubs in mid-2002, as a source of additional volunteers to help conduct surveillance and health education about dracunculiasis in endemic villages of the highest endemic districts in the country. By the end of 2003, over 6,000 women were involved in the program, with additional support for them provided by The Carter Center, UNICEF and WHO. The enthusiasm and hard work of these new allies have been important assets to the program. As summarized in Table 1, the overall percentage change in reported incidence of dracunculiasis in the 6 districts that mobilized this activity first, being the six highest endemic districts in the country in 2002, was -36% (from 1,064 cases to 681 cases) between November-December 2002 and the same two months of 2003, whereas the percentage change in reported incidence over the same period in the next highest endemic 6 districts that did not have that involvement in 2002 was a 56% increase in cases (from 186 to 291).

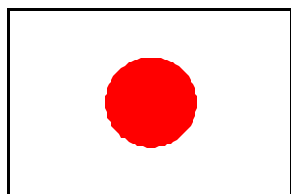
Ghana's overall 48% increase in cases in 2003 masks some important reductions. Although Northern Region overall recorded a 40% increase in cases (from 4,271 to 5,994) and Volta Region experienced an explosive increase of 395% (from 305 to 1,511), Brong-Ahafo Region, the other member of the "big three", reduced its cases by -37% (from 779 to 492). Within the Northern Region, Zabzugu-Tatale District reduced its cases by -47% (from 863 to 461), and Saboba-Chereponi reduced its cases by -60%, from 127 to 51). The number of Ghanaian villages reporting one or more cases during the year increased from 739 in 2002 to 973 in 2003, but the number of villages reporting endemic cases in 2003 was 733.

Table 1

Numbers of Cases of GWD and % Change During November –December 2002 and January 2003 and the Same Months in 2003 and 2004 in Endemic Districts with and without GRCS Mothers Clubs

6 Districts with GRCS Mothers Clubs				6 Districts without GRCS Mothers Clubs			
District	Reported cases of Dracunculiasis		% Change	District	Reported cases of Dracunculiasis		% Change
	Nov. - Dec. 02 and Jan 03	Nov. - Dec. 03 and Jan 04			Nov. - Dec. 02 and Jan 03	Nov. - Dec. 03 and Jan 04	
Zabzugu - Tatale	150	59	-61%	Gushegu-Karaga	112	132	18%
Nanumba	549	331	-40%	Yendi	98	93	-5%
East Gonja	446	253	-43%	Saboluqu Chereponi	14	8	-43%
Tamale	199	57	-71%	Saveluqu-Nanton	9	127	1311%
West Gonja	124	110	-11%	Tolon Kumbungu	25	199	696%
Atebubu	240	141	-41%	Kintampo	71	33	-54%
Total	1708	951	-44%	Total	329	592	80%

JAPAN GRANT OF \$100,000 FOR TOGO'S GWEP; MINISTER OF HEALTH VISITS ENDEMIC VILLAGE



JAPAN

During President Carter's visit to Togo, Japan's Ambassador to Cote D'Ivoire, Mr. Yuji Kurokawa, who is also his country's accredited representative to Togo, presented The Carter Center with a check for approximately \$100,000 in support of the Center's assistance to Togo's Guinea Worm Eradication Program. The funds will be used to support training of village-based health workers, operation of case containment centers, fabrication and distribution of cloth filters, and treatment of unsafe water sources with ABATE® larvicide. Carter Center Executive Director Dr. John Hardman signed the grant agreement on behalf of The Carter Center. On January 22, 2004, Togo's Minister of Health, the Honorable Ms.

Suzanne Aho, visited an endemic village in Doufelgou District of northern Togo. This district reported 41 cases of dracunculiasis in 2002, and 13 cases in 2003, a reduction of -68%. The national coordinator of Togo's program, Mr. K. Ignace Amegbo, accompanied the minister on her visit. *Erratum:* an article in last month's issue inadvertently understated the number of Togo's cases that were contained in case containment centers during 2003. The correct number is 162, or 24% of all cases.

Table 2

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	260 / 1175	122 / 702	270 / 872	255 / 1185	257 / 2309	240 / 2523	279 / 2591	280 / 2316	304 / 1713	569 / 2448	544 / 1314	163 / 336	3543 / 19484	18	
GHANA	485 / 900	769 / 1339	555 / 944	622 / 940	524 / 785	374 / 558	288 / 474	126 / 203	81 / 158	150 / 278	352 / 712	426 / 994	4752 / 8285	57	
NIGERIA	389 / 568	179 / 243	106 / 128	53 / 61	30 / 52	49 / 58	49 / 68	34 / 48	22 / 31	28 / 32	53 / 63	87 / 108	1079 / 1460	74	
TOGO	110 / 149	28 / 44	21 / 29	38 / 44	73 / 87	53 / 72	53 / 63	14 / 22	18 / 27	24 / 29	25 / 35	37 / 68	494 / 669	74	
MALI	3 / 3	4 / 4	5 / 5	2 / 3	3 / 3	8 / 8	42 / 84	92 / 160	122 / 250	106 / 206	37 / 73	16 / 23	440 / 822	54	
BURKINA FASO	6 / 6	1 / 2	0 / 1	3 / 5	14 / 16	27 / 62	24 / 34	12 / 19	12 / 21	11 / 18	4 / 12	5 / 7	119 / 203	59	
NIGER	0 / 0	1 / 1	0 / 0	2 / 2	0 / 0	6 / 6	27 / 37	30 / 47	33 / 71	11 / 73	22 / 38	13 / 18	145 / 293	49	
COTE D'IVOIRE	7 / 21	5 / 8	1 / 2	1 / 4	3 / 3	1 / 2	0 / 0	0 / 0	0 / 0	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	2 / 2	1 / 1	2 / 2	30 / 30	100	
ETHIOPIA	0 / 0	0 / 0	3 / 3	7 / 7	7 / 7	5 / 5	1 / 1	1 / 1	4 / 4	0 / 0	0 / 0	0 / 0	28 / 28	100	
MAURITANIA	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	1 / 1	2 / 3	1 / 1	3 / 4	2 / 3	0 / 0	1 / 1	10 / 13	77	
UGANDA	0 / 0	0 / 0	0 / 0	3 / 3	9 / 11	4 / 6	1 / 2	0 / 2	0 / 0	2 / 2	0 / 0	0 / 0	19 / 26	73	
KENYA	1 / 1	1 / 1	1 / 1	1 / 1	4 / 4	1 / 1	2 / 2	2 / 2	1 / 1	1 / 1	1 / 1	1 / 1	0 / 12	0	
TOTAL*	1281 / 2844	1110 / 2344	962 / 1985	986 / 2254	920 / 3277	768 / 3302	768 / 3361	590 / 2821	599 / 2280	905 / 3091	1038 / 2249	750 / 1557	10677 / 31365	34	
% CONTAINED	45	47	48	44	28	23	23	21	26	29	46	48	34		

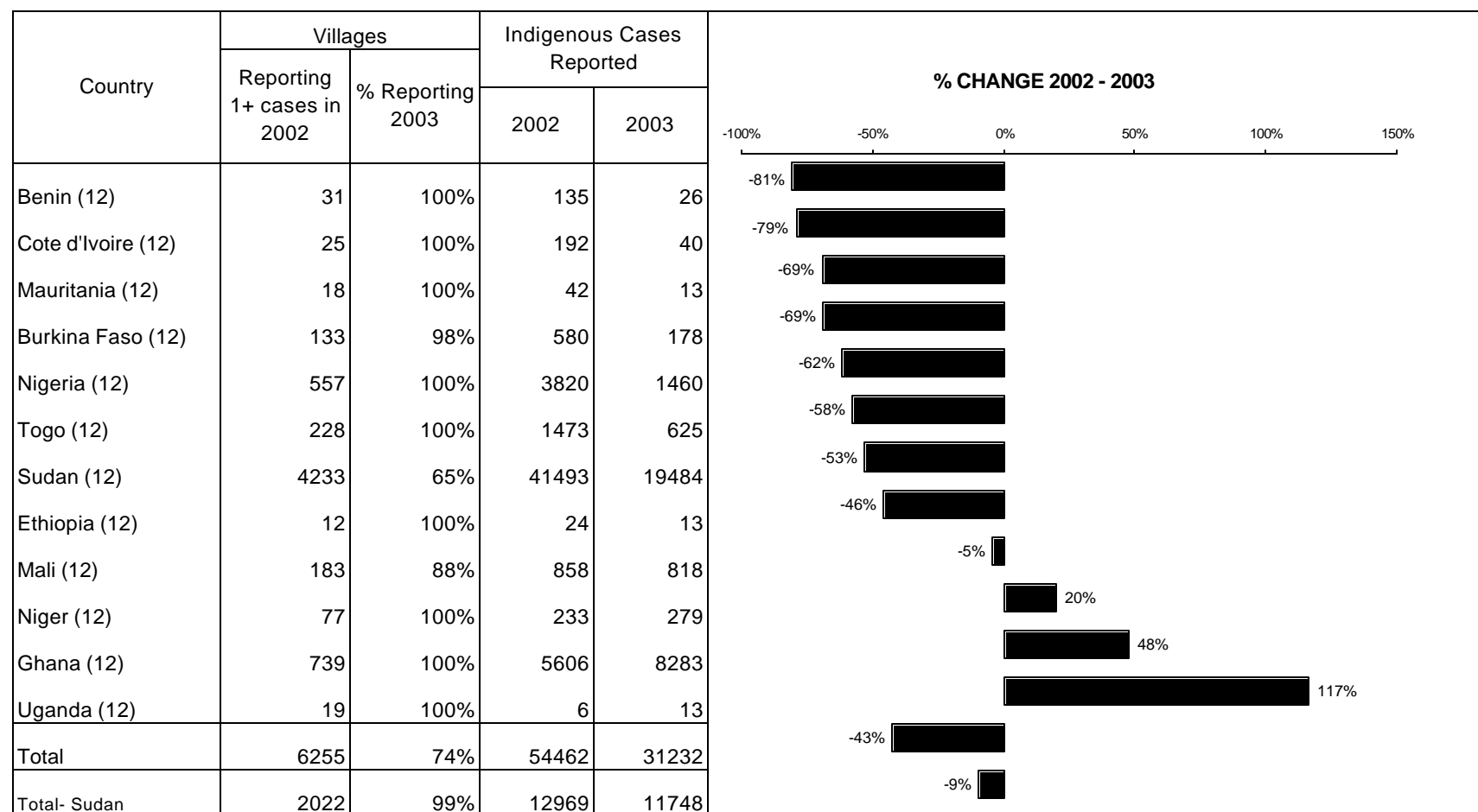
* PROVISIONAL

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 1

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

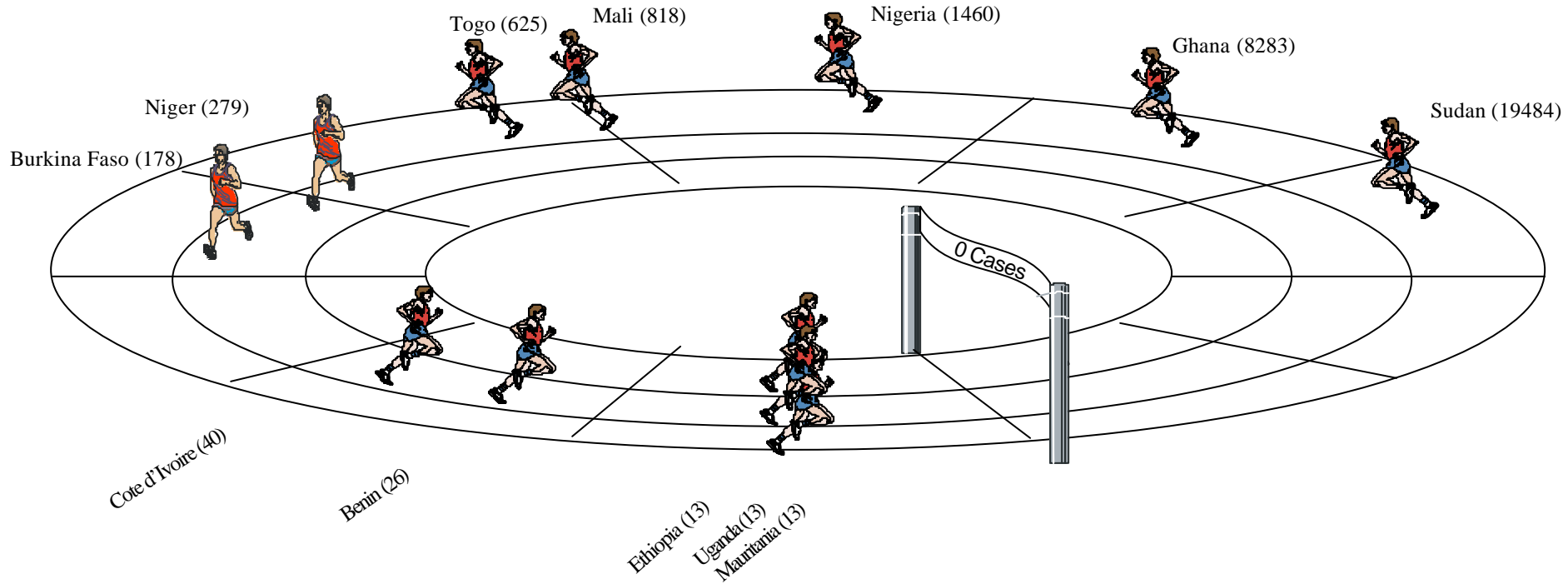


(12) Indicates month for which reports were received, e.g., Jan. - Dec. 2003

* Provisional

Figure 2

GUINEA WORM RACE 2003*



*Provisional data, Reported Indigenous cases of Guinea Worm Disease

Figure 3

Number of Reported Cases of Dracunculiasis by year, 1990 - 2003*

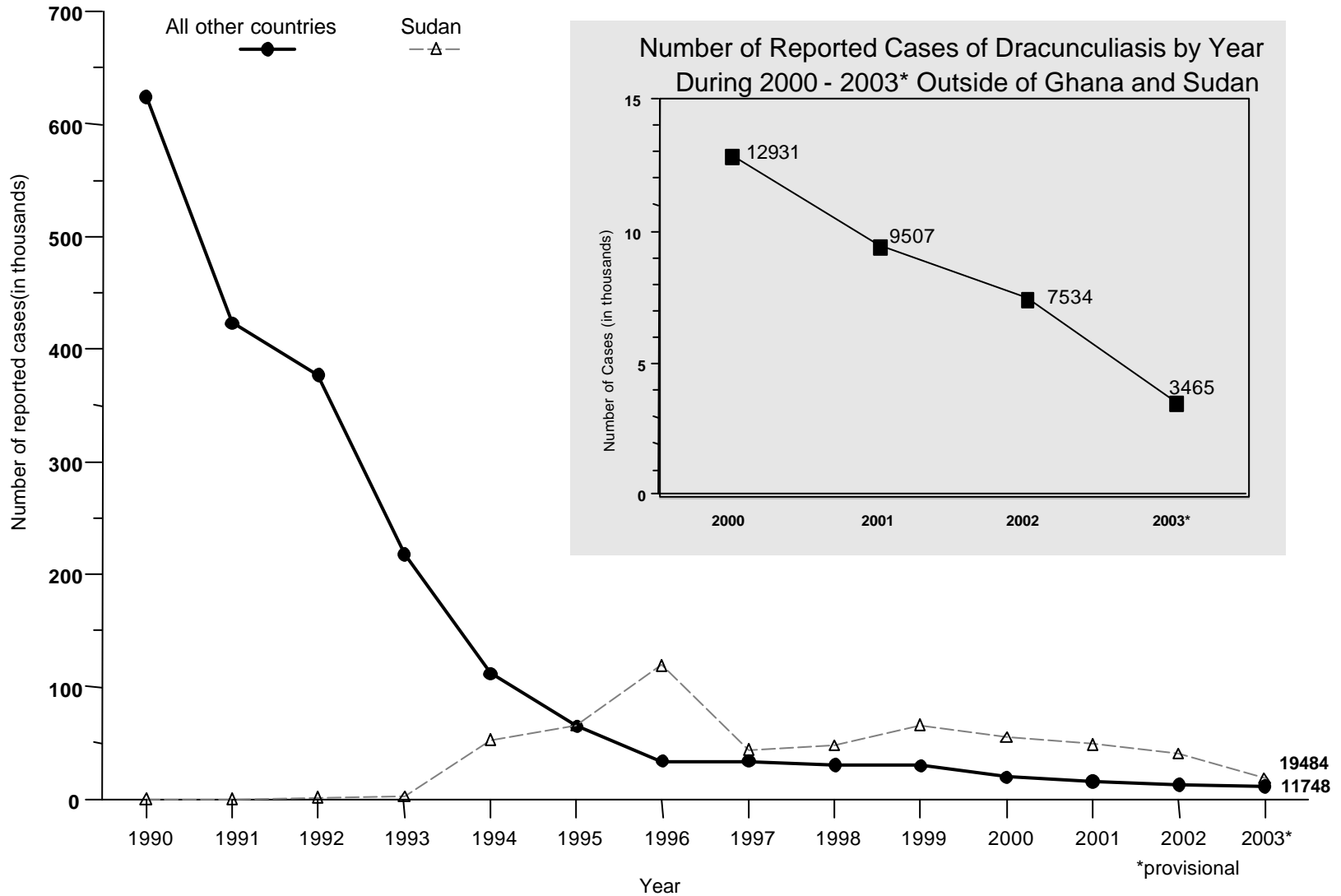


Figure 4

Number of Person Months of Technical Assistance Provided, Number of Worm Weeks Conducted, and number of Case Containment Centers in Operation During 1999-2003*

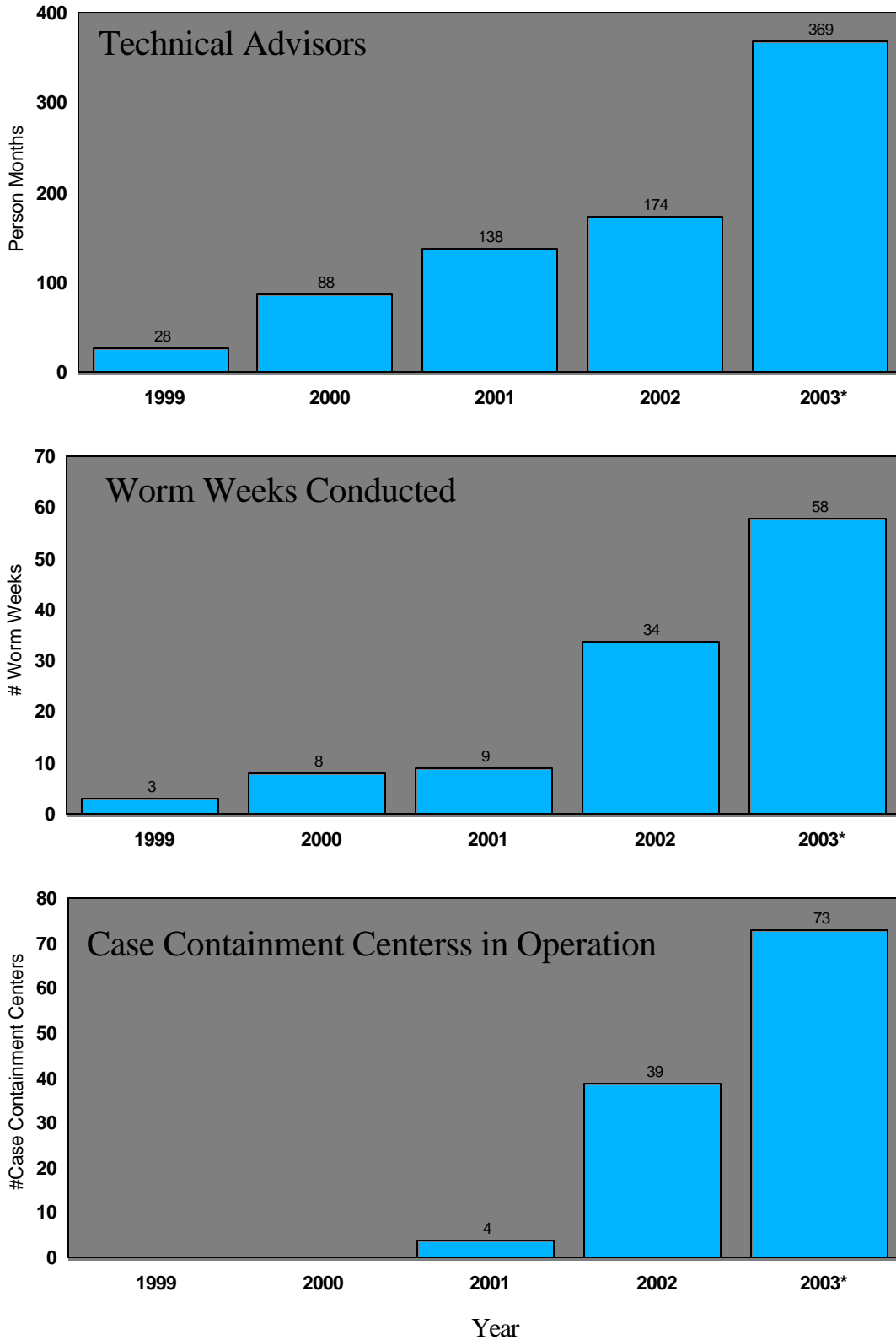


Table 3

Number of cases contained and number reported by month during 2004*
(Countries arranged in descending order of cases in 2003)

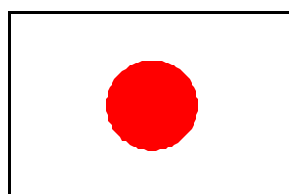
COUNTRIES REPORTING CASES	NUMBER OF CASES CONTAINED / NUMBER OF CASES REPORTED													CONT.	%
	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL*		
SUDAN	/	/	/	/	/	/	/	/	/	/	/	/	0 / 0		
GHANA	473 / 1211	/	/	/	/	/	/	/	/	/	/	/	473 / 1211	39	
NIGERIA	81 / 101	/	/	/	/	/	/	/	/	/	/	/	81 / 101	80	
MALI	1 / 1	/	/	/	/	/	/	/	/	/	/	/	1 / 1		
TOGO	36 / 46	/	/	/	/	/	/	/	/	/	/	/	36 / 46	78	
NIGER	1 / 1	/	/	/	/	/	/	/	/	/	/	/	1 / 1	100	
BURKINA FASO	1 / 1	/	/	/	/	/	/	/	/	/	/	/	1 / 1	100	
COTE D'IVOIRE	2 / 2	/	/	/	/	/	/	/	/	/	/	/	2 / 2	100	
BENIN	0 / 0	/	/	/	/	/	/	/	/	/	/	/	0 / 0		
ETHIOPIA	0 / 0	/	/	/	/	/	/	/	/	/	/	/	0 / 0		
UGANDA	0 / 0	/	/	/	/	/	/	/	/	/	/	/	0 / 0		
MAURITANIA	/	/	/	/	/	/	/	/	/	/	/	/	0 / 0		
TOTAL*	595 / 1363	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	595 / 1363	44	
% CONTAINED	44														

* PROVISIONAL

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

NIGERIA REDUCES CASES BY -62% IN 2003

Nigeria reported a total of 1,460 cases of dracunculiasis in 2003, which represents a stunning reduction of -62% in cases compared to the 3,820 cases reported in 2002. The number of Nigerian villages reporting one or more cases fell by -53%, from 575 to 272 over the same period, and Nigeria exported no cases to Cameroon over the entire calendar year for the first time since the program began. These accomplishments resulted from hard work in 2002, when the Nigerian Guinea Worm Eradication Program (NIGEP) restructured itself into five zones instead of four, increased the proportion of endemic villages with full filter coverage to 98% (from 89%), introduced “Worm Weeks” (6 LGAs) and case containment centers (2), and doubled technical assistance provided by The Carter Center (to 23 person-months, from 9 person-months in 2001). The five highest endemic LGAs which had Worm Weeks in 2002 experienced a -77% reduction in cases in 2003, from 469 cases to 110 cases (range: -70% to -88%), whereas the other 13 of Nigeria’s top 18 LGAs reduced their cases by -52% (range: -13% to -100%), from 2,354 cases to 1,125 cases. NIGEP intensified pressure on the disease even more during 2003, by increasing Worm Weeks from 6 to 11 LGAs, increasing case containment centers from 2 to 23 and its overall reported case containment rate from 65% to 74%, and increasing the proportion of endemic villages with at least one source of safe drinking water to 68% from 57%. Of Nigeria’s 1,460 cases in 2003, 551 (38%) were admitted to case containment centers. Nigeria has reported -82% fewer cases of dracunculiasis in January 2004 than in January 2003. (See Table 4 below).



JAPAN

The vice-president of Nigeria and the Ambassador of Japan to Nigeria joined the governor and other authorities in Nigeria’s Oyo State in a dedication ceremony for 2 drilling rigs provided by the Japan International Cooperation Agency (JICA) on January 8, 2004. Both rigs operated in Ibarapa North Local Government Area (LGA) on January 1-18, and one was moved to Iseyin LGA on January 19. In 2003, Ibarapa North LGA was the second-ranked LGA in all of Nigeria, reporting 230 (16%) of the country’s cases. Iseyin LGA ranked fifth, reporting 106 (7%) cases.

SEVEN COUNTRIES REDUCE CASES BY -81% IN JANUARY

Benin, Burkina Faso, Cote d’Ivoire, Ethiopia, Niger, Nigeria, and Togo have reported a collective total of only 151 cases of dracunculiasis for January 2004, compared to 765 cases reported by the same countries in January 2003 (Table 4). A year ago, the same seven countries reported a reduction of only -22% from the 975 cases they reported in January 2002. These countries contained 80% of the January 2004 cases, 70% of January 2003 cases and 65% of January 2002 cases.

Table 4

Reduction in Cases of Guinea Worm Disease in January 2003, 2004 in Seven Countries

Country	January			% Change 03 - 04
	2002	2003	2004	
Nigeria	647	568	101	-82%
Burkina Faso	10	6	1	-83%
Benin	28	21	0	-100%
Cote d'Ivoire	91	21	2	-90%
Togo	193	149	46	-69%
Niger	6	0	1	~
Ethiopia	0	0	0	0%
Total	975	765	151	-80%
% Change 02 - 03	-22%			

BURKINA FASO'S GUINEA WORM ERADICATION PROGRAM MEASURABLE OBJECTIVES 2004

- Detect 100% of all of Guinea Worm Disease (GWD) in Burkina Faso [now 100%]
- Contain 100% of GW cases of GWD in known endemic localities [now 60%]
- Admit 75% of cases of GWD containment centers (where available) within 24 hours of emergence of the worm [now 57%]
- Cross-notify 100% of imported cases of GWD upon receiving information at the district and the national level (either domestically or internationally imported cases) [now 100%]
- Ensure 100% household filter coverage in all endemic villages before the peak transmission season [now 100%]
- Train (and re-train when necessary) community health workers in endemic and under- surveillance villages
- Ensure 100% of regional and district health teams include GWD surveillance activities in their yearly action plans and carry out active surveillance activities [now 60% for the whole country]
- Construct 35 new pumps in endemic villages [by end of 2003 = 24 pumps]
- Apply ABATE® larvicide on a timely basis to 100% of treatable drinking water sources [now 100%]
- Ensure that 100% of endemic villages benefit from health education activities during the peak of transmission season (national TV /radio, local radio) [now media are not used regularly]
- Create and distribute two educational films on GWD and community mobilization [no educational films currently in use]
- Conduct Guinea Worm Weeks in the four most endemic districts [9 Worm Weeks conducted in 2003]
- Officially investigate and document 100% of rumors about alleged cases of GWD. [now 75%]

NIGERIA'S GUINEA WORM ERADICATION PROGRAM MEASURABLE OBJECTIVES 2004

- Detect 100% of all Guinea Worm cases within 24 hours of the emergence of the Guinea worm. [No data]
- Contain 100% of all cases of GWD [now 74%]
- Admit 80% of all cases of GWD to case containment centers (CCCs) within 24 hours. [now 43%]
- Contain all cases admitted to CCCs. [now 73%]
- Obtain 100% of monthly reports from all endemic villages (EVs) on time. [now 100%]
- Investigate the origin of all imported cases of GWD. [now 85%]
- Provide filters to 100% of households in every endemic village (EV). [now 95%]
- Monitor the status of safe water monthly in the top 100 endemic villages (20 top EVs per Zone). [now 86%]
- Conduct spot checks for copepods after ABATE® larvicide treatments in the top 100 EVs where ABATE is used. [now None]
- Conduct Worm Weeks in highest endemic districts (LGAs) at least once annually. [now 67%]
- Conduct health education in schools of top 100 Evs. [No data]
- Disseminate GW messages via radio twice per week during peak transmission season in endemic districts (LGAs). [No data]

NEWS FROM THE WORLD HEALTH ORGANIZATION



The Gambia. At the request of the International Commission for Certification of Dracunculiasis Eradication (ICDDE), a WHO team visited The Gambia from 13 to 19 October 2003 to assess whether transmission of dracunculiasis occurs in this country. A total of 26 villages, representing various parts of the country, were selected, visited, and 157 persons were interviewed. The report of this assessment will be presented to the ICCDE during its March 9-11, 2004 meeting in Geneva.

Senegal. An International Certification Team (ICT) commissioned by WHO visited Senegal from 19 October to 2 November 2003 to ascertain the interruption of transmission of dracunculiasis, and prepare a report for review by the ICCDE at its next meeting. The ICT visited areas which were recently endemic along the Falemé river as well as the area

of Kedougou. In addition places without records of Guinea worm or historical foci in the centre and the northern part of the country were also investigated. A total of 101 villages were visited and 593 persons interviewed. The report of the ICT will also be discussed during the next meeting of the ICCDE in March.

Yemen. From 28 November to 14 December 2003, a WHO ICT visited Yemen to prepare a report for the certification of interruption of transmission of dracunculiasis in Yemen. The ICT held meetings and studied the country report. Practically all formerly endemic areas and at risk areas were visited by three teams, each headed by one WHO consultant. Each team visited three governorates covering about ten villages in each governorate and interviewing six persons in each village. A checklist was used for governorate and district levels and questionnaires for interviewing 529 persons. The ICT will present its report to the ICCDE during its next meeting in March.

Kenya. From 18-31 January 2004, WHO sent a mission to Kenya that was comprised of Dr. A. Tayeh and Dr. J.B. Rwakimari, the National Coordinator of Uganda's Guinea Worm Eradication Program, in his capacity as a WHO Temporary Advisor. The visit included meetings with officials from WHO/Kenya, Ministry of Health, other UN Agencies and NGOs, as well as field visits to the three formerly endemic districts of Trans Nzoia, West Pokot, and Turkana to assess the implementation of Guinea worm activities of the program, and develop plans for 2004. The mission found that 7 imported cases were recorded in Kakuma refugee camp and 3 imported cases recorded in Lokichokio during 2003 but were not reported to Ministry of Health. This raises the total number of dracunculiasis for 2003 in Kenya to 12 imported cases.

In anticipation of the repatriation of Sudanese refugees in Kenya, WHO is planning to assist with the training of health workers in the refugee camps to educate refugees about dracunculiasis and its prevention.

Uganda. Uganda's Guinea Worm Eradication Program held its 8th Inter-District Meeting in Mbale from 17 to 18 of February 2004 to review the program status during 2003 and prepare plans for 2004. It was opened by the Minister of State in Charge of Primary Health Care and attended by high officials from the Ministry of Health and Mbale political leaders. Guinea worm coordinators and other health officials from 17 endemic and formerly endemic districts, and officials in charge health care in 5 refugee camps attended. Representatives from WHO/Kenya and UNICEF/Kenya and Dr. Ahmed Tayeh, WHO/Geneva participated in the meeting. The theme of the meeting was "The Final Assault to Guinea Worm".

Meeting in Addis Ababa. WHO sponsored and organized a Program Review Meeting for Guinea Worm Eradication Programs in Ethiopia, Kenya, Sudan and Uganda in Addis Ababa, Ethiopia, on November 18-20, 2003. The national coordinators and other officials of those countries, as well as representatives from UNICEF, WHO and The Carter Center attended the meeting. Dr. M. Karam and Dr. A. Tayeh represented WHO, Geneva.

IN BRIEF:

Niger: We extend a warm welcome back to Mr. Oumarou Harou, who has been named the new National Program Coordinator of Niger's GWEP, effective February 11, 2004! Mr. Oumarou was the program's deputy director under Mr. Sadi Moussa, who is now a Foege Fellow at Emory University's Rollins School of Public Health in Atlanta. Mr. Oumarou has himself just returned from career development leave to study epidemiology at the Niamey Institute of Public Health.

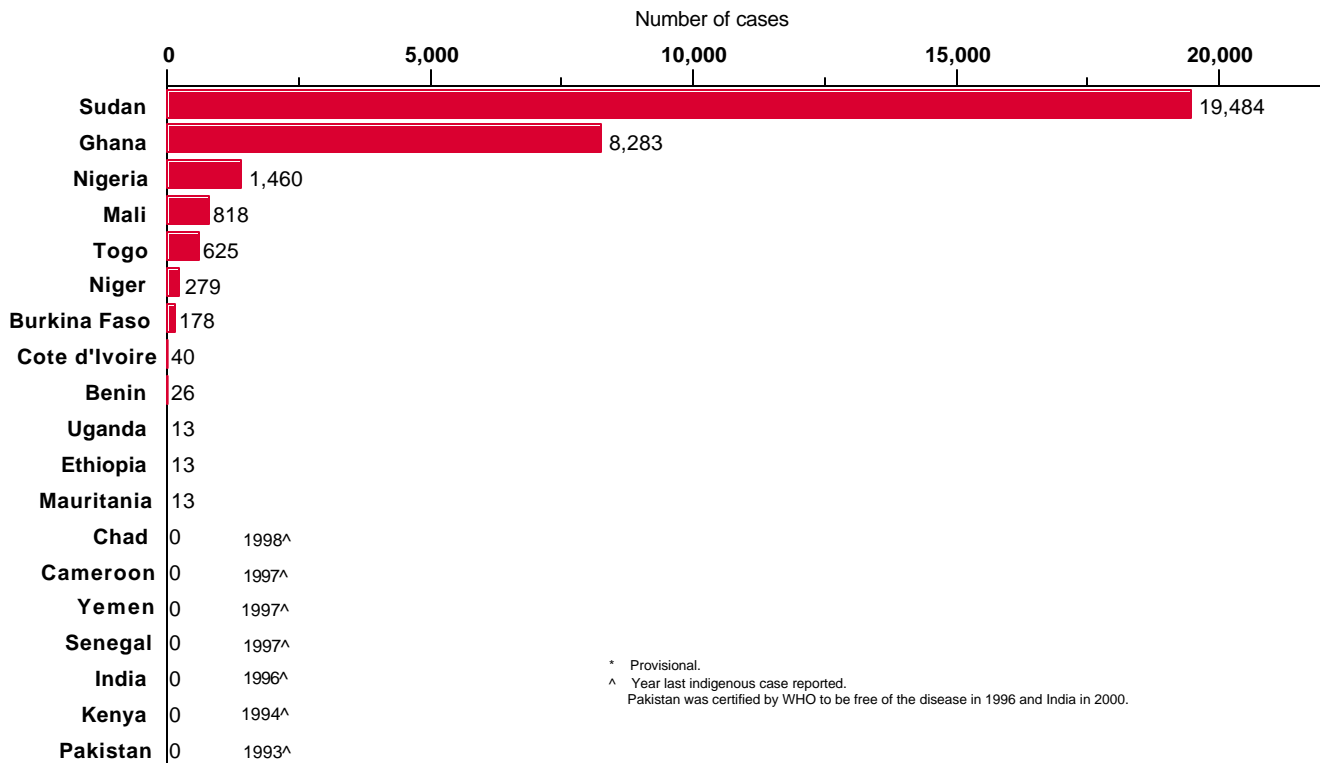
Burkina Faso: will hold its GWEP National Review Meeting in Dori District (Sahel Region) during March 16-17, 2004.

RECENT PUBLICATIONS

Greenway C, 2004. Dracunculiasis (guinea worm disease). *Canadian Med Assoc J.* ; 170(4):495-500.

Figure 5

Distribution by Country of 31,232 Indigenous Cases of Dracunculiasis Reported 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.