



Date: June 28, 2002



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

Subject: GUINEA WORM WRAP-UP #124

To: Addressees

WHAT'S NEW IN 2002? USING PRIMARY HEALTH CARE TO STOP TRANSMISSION FROM GUINEA WORM PATIENTS

During the last 10 years national Guinea Worm Eradication Programs (GWEP) outside of Sudan have steadily reduced the incidence of Guinea worm disease – in 2001 only 14,246 cases were reported from 12 endemic countries. Because at this end-stage of the campaign outside of Sudan we must find ways to improve the effectiveness of containment of transmission from patients with the disease, a year ago we published an editorial (see [Guinea Worm Wrap-Up #113](#), June 2001, pp 2-4) outlining compelling biological, epidemiological, operational, and economic arguments for doing so. This editorial is another call to ministry of health authorities in endemic countries to encourage the primary health care system to provide medical care for as many patients as possible, particularly during the first 4–7 days after the Guinea worm begins to emerge, and to simultaneously encourage patients with Guinea worm disease to seek care before or within 24 hours of the emergence of the worm.

The advantage to patients is that proper medical care can reduce the severity and duration of their illness, allowing them to return to work or school sooner. The advantage to the GWEPs is that ensuring that patients receive such care early will prevent patients from contaminating water sources and thus effectively stopping transmission of their infections to others, which is the objective of this campaign and which needs to be attained soon and with urgency. Just as GWEPs cannot themselves provide safe drinking water sources to endemic communities, but rather advocate for provision of such services by others, the role of GWEPs should be to get the country's primary health care system and other sources such as clinics staffed by non-governmental organizations to treat and help isolate persons with dracunculiasis.

Physical isolation of infected individuals to prevent their infection from spreading to other persons is a proven public health principle of long standing, which could escalate the struggle to STOP TRANSMISSION NOW. To be effective, programs must ensure that Guinea worm patients enter into such care voluntarily, as early as possible (preferably just before the worms begin to emerge), for as long as necessary, and that such services reach as many Guinea worm patients as possible.

Outside of Sudan, the number of cases now occurring is manageable in most areas. Where primary health care facilities exist, they should be used. In endemic areas that are not close to a clinic or other primary health care facility, communities could do what villagers did spontaneously for smallpox years ago: erect temporary shelters and provide food, water and medical care for patients there. The quality of the experience must be good enough that Guinea worm patients will want to be admitted. Just as word of bad experiences will stop patients from seeking or accepting such care, word of good experiences will encourage others to come forth early to receive care and relieve their suffering. Uganda and Ethiopia have both used temporary “containment houses” for this purpose in recent years, with favorable results. Togo is taking the lead in implementing this concept in West Africa. Since opening its first containment center in Ogo District in August 2001, Togo's Guinea Worm Eradication Program has identified 12 more centers, covering eight of the twelve highest-endemic districts in the country. Although one center was

overwhelmed by too many patients during the past peak transmission season, the others, most of which are existing clinics, dispensaries or district hospitals, all report being able to manage the Guinea worm patients while continuing to care for other patients as well. So far this year (through May) only about 28% of 436 cases have been isolated in such centers, but this proportion is expected to increase significantly. Ghana and Nigeria have begun adding this strategy to their interventions as well.

LATEST DATA REPORTED

The numbers of cases of dracunculiasis reported so far during 2002 by each of the endemic countries are shown in Table 1, and the percentage reductions in indigenous cases reported during comparable periods in 2001 and 2002 are shown in Figure 1. Data received so far on the status on interventions in each endemic country is shown in Table 2. Trends regarding the number of cases of dracunculiasis reported since 1989 from Nigeria, Ghana, and Uganda, the three mostly highly endemic countries at the beginning of the campaign, are shown in Figure 2. Table 3 indicates the number of reported importations and exportation of cases of dracunculiasis by month and country of origin.

IN BRIEF

Burkina Faso. In May, the Council of Ministers cited the progress of the national Guinea Worm Eradication Program, and formally congratulated the National Program Coordinator, Dr. Dieudonne Sankara, for his effective work! Global 2000 Technical Advisor Ms. Leslie Blanton arrived in May to assist the GWEP in Gorom-Gorom District during this peak transmission season.

Sudan reports ZERO indigenous cases in the northern states in April 2002! This compares to three indigenous cases reported in April 2001. Three imported cases were detected in northern states in May 2002; all three were contained.

Ghana. Global 2000/The Carter Center has designated Ms. Nwando Diallo as its new Resident Technical Advisor. She arrived in country June 9 and will officially assume her new duties on July 1, 2002. Ms. Diallo is a graduate of Princeton University. She has worked as senior program officer in the office of Global 2000 Technical Director for Guinea worm eradication, Dr. Ernesto Ruiz, from 1998 to 2002, and also was a resident consultant to the GWEP in Cote d'Ivoire for six months. Her predecessor in Ghana, Mr. Emmanuel Puplampu, will return to the Centers for Disease Control and Prevention.

Nigeria. General (Dr.) Yakubu Gowon conducted follow-up visits to Niger, Oyo and Ogun States on May 16, and May 23-24, respectively. The Nigerian Guinea Worm Eradication Program (NIGEP) held its first Steering Committee meeting in 2002 at Ikoyi, in Oyo State, on May 21-22. NIGEP also held a cross-border meeting with Cameroon at Mora, Cameroon on May 23rd. The minor reductions in cases reported by the Nigerian program for April and May 2002, compared to the previous year, are due mainly to increased cases in two central states, Niger and Benue, for those months.

Niger. The head of state, the Honorable Mamadou Tanja, taped messages in Hausa about Guinea worm prevention and the status of the campaign in Niger during a visit to an endemic village (Kissambana) in Zinder Region on May 31st. The messages will be broadcast on the Voice of America radio transmission. On June 10, the minister of health of Niger, the Honorable Ibrahim Komma, wrote to the National Program Coordinator, Mr. Sadi Moussa, congratulating him on the progress and on the "remarkable quality of work" of Niger's Guinea Worm Eradication Program.

Table 1

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

(Countries arranged in descending order of cases in 2001)

ENDEMIC COUNTRY	NUMBER OF CASES CONTAINED / NUMBER OF CASES REPORTED												TOTAL*
	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	
SUDAN	632 / 1074	534 / 1022	459 / 800	590 / 1143	/	/	/	/	/	/	/	/	2215 / 4039
NIGERIA	350 / 647	195 / 336	148 / 220	152 / 232	205 / 244	/	/	/	/	/	/	/	1050 / 1679
GHANA	497 / 744	389 / 680	303 / 412	283 / 367	291 / 469	/	/	/	/	/	/	/	1763 / 2672
TOGO	147 / 189	70 / 98	18 / 40	12 / 24	32 / 85	/	/	/	/	/	/	/	279 / 436
BURKINA FASO	8 / 10	27 / 30	21 / 22	23 / 33	67 / 84	/	/	/	/	/	/	/	146 / 179
MALI	4 / 5	4 / 5	4 / 5	0 / 0	1 / 6	/	/	/	/	/	/	/	13 / 21
NIGER	6 / 6	0 / 0	0 / 0	0 / 0	4 / 4	/	/	/	/	/	/	/	10 / 10
COTE D'IVOIRE	90 / 91	52 / 52	23 / 24	9 / 9	1 / 3	/	/	/	/	/	/	/	175 / 179
BENIN	28 / 28	8 / 11	7 / 8	5 / 5	1 / 1	/	/	/	/	/	/	/	49 / 53
MAURITANIA	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	/	/	/	/	/	/	/	0 / 0
UGANDA	0 / 0	0 / 0	1 / 1	1 / 1	3 / 3	/	/	/	/	/	/	/	5 / 5
CAR	/	/	/	/	/	/	/	/	/	/	/	/	0 / 0
ETHIOPIA	0 / 0	0 / 0	1 / 1	2 / 5	10 / 14	/	/	/	/	/	/	/	13 / 20
KENYA	/	/	/	2 / 2	/	/	/	/	/	/	/	/	2 / 2
TOTAL*	1762 / 2794	1279 / 2234	985 / 1533	1079 / 1821	615 / 913	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	5720 / 9295
% CONTAINED	63	57	64	59	67								62

* PROVISIONAL

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

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

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

Kenya reported 2 cases imported from Sudan in April.

Figure 1

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



* provisional

^ 2,523 (31%) of 8,269 endemic villages are not accessible to the program

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

NR No Report

Table 2

Dracunculiasis Eradication Campaign: Status of Interventions during 2002*

Country	Number of cases reported in 2002	Number of villages reporting 1 or more cases in 2001	Percentage of Endemic Villages				
			with filters in 100% of h/h	using Abate	with 1+ sources of safe water	provided H.E.	% of cases contained
Sudan (4)	4039	3921	45%	1%	62%	56%	55%
Nigeria (5)	1679	733	96%	27%	53%		84%
Ghana (5)	2667	799	59%	17%	31%	65%	66%
Togo (5)	436	180	93%	86%			38%
Burkina Faso (5)	176	202	56%	24%	82%	64%	80%
Mali (5)	21	120	33%	0%	24%	100%	17%
Niger (5)	10	50	80%	0%	59%	100%	100%
Cote d'Ivoire (5)	179	28	65%	65%	65%	70%	33%
Benin (5)	53	39	78%	80%	80%	80%	100%
Mauritania (5)	0	25					
Uganda (5)	5	8	77%	54%	65%		100%
Ethiopia (5)	20	10	73%	60%	47%	100%	71%

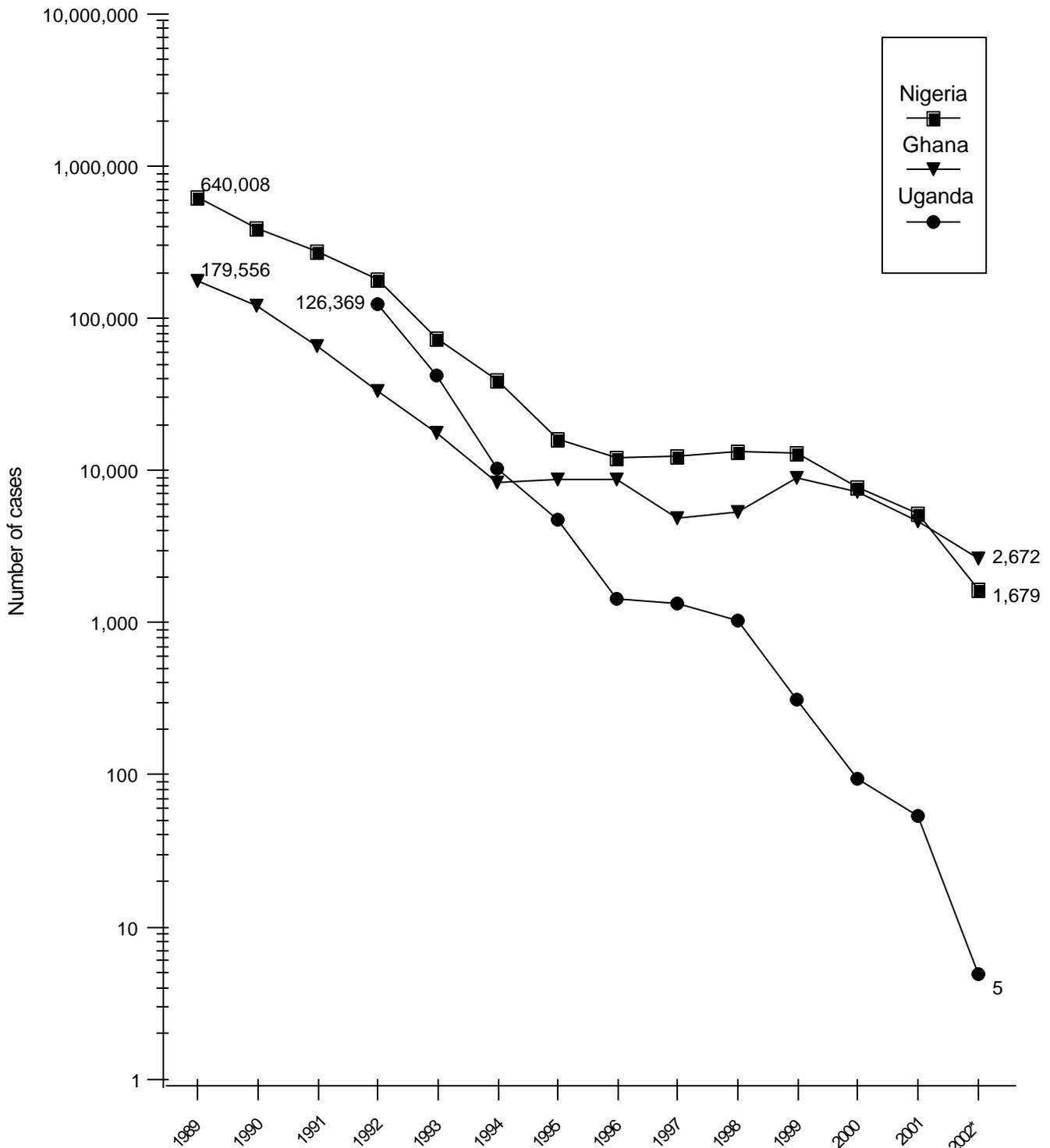
* provisional

(5) Indicates month for which reports were received, e.g., Jan. - May. 2002

Blank spaces indicate no current data are available. National Program Coordinators are reminded of their obligation to report on the status of all interventions monthly, in addition to reporting the number of cases detected and contained.

Figure 2

Number of Cases of Dracunculiasis Reported Since 1989 from the Guinea Worm Eradication Programs in Ghana, Nigeria, and Uganda



* provisional: January - May 2002

MEETINGS

The 2002 Program Review for endemic francophone countries (Benin, Burkina Faso, Central African Republic, Cote d'Ivoire, Mali, Mauritania, Niger, Togo) will be held in Nouakchott, Mauritania on October 28-30.

The 43rd Meeting of the Interagency Coordinating Group for Dracunculiasis Eradication met at the headquarters of the US Agency for International Development (USAID) in Washington, D.C. on June 20. Representatives of USAID, WHO, UNICEF, World Bank, The Carter Center and CDC participated. The 5th meeting of the Gates Guinea Worm Grant Committee, being representatives of WHO, UNICEF, World Bank and The Carter Center, met immediately afterward.

CERTIFICATION ACTIVITIES



WHO staff have recently visited Central African Republic ([Dr. Alhousseini Maiga](#)), Ethiopia ([Dr. Ahmed Tayeh](#)), and Uganda ([Dr. Tayeh](#)) to assist the National GWEP. Dr. Maiga will also soon visit Mauritania, and Dr. Tayeh will visit Yemen, to assist in their preparations for eventual certification. Formal visits by International Certification Teams (ICT) are planned for Senegal later this year, and Yemen in 2003. WHO has requested formal Country Reports from Angola, Cameroon, Congo, Democratic Republic of the Congo, Gabon, Gambia, Guinea, Guinea Bissau, Liberia, Madagascar and Sierra Leone. The next (5th) meeting of the International Commission for the Certification of Dracunculiasis Eradication is tentatively scheduled to be held in November 2003.

RECENT PUBLICATIONS

Anonymous, 2002. Final push for Guinea worm eradication. [Sudanow](#) April. [cover story]

WHO, 2002. Report on the status of the dracunculiasis eradication campaign in 2001. Geneva: World Health Organization. WHO/CDS/CPE/CEE/2002.30.

Zhu W., Baggerman G., Secor WE., Casares F., Pryor SC., Fricchione GL., Ruiz-Tiben E., Eberhard NL., Bimi L., Stefano GB., 2002. *Dracunculus medinensis* and *Schistosoma mansoni* contain opiate alkaloids. [Annals of Tropical Medicine & Parasitology](#). 96(3):309-316.

Table 3

Dracunculiasis Eradication Campaign
Reported Importations and Exportations of Cases of Dracunculiasis: 2002

From	»»»	To	Month and number of cases imported							Number of cases exported	
			Jan.	Feb.	Mar.	Apr.	May	June	July		Total
Sudan	»»»	Ethiopia			1		2			3	Sudan = 8
Sudan	»»»	Kenya				2			2		
Sudan	»»»	Uganda				1	2			3	
Togo	»»»	Benin			4					4	Togo = 4
Ghana	»»»	Benin			1	1				2	Ghana = 2
Nigeria	»»»	Niger					1			1	Nigeria = 1
Total			0	0	6	4	5	0	0	15	

* Provisional

*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.