



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**

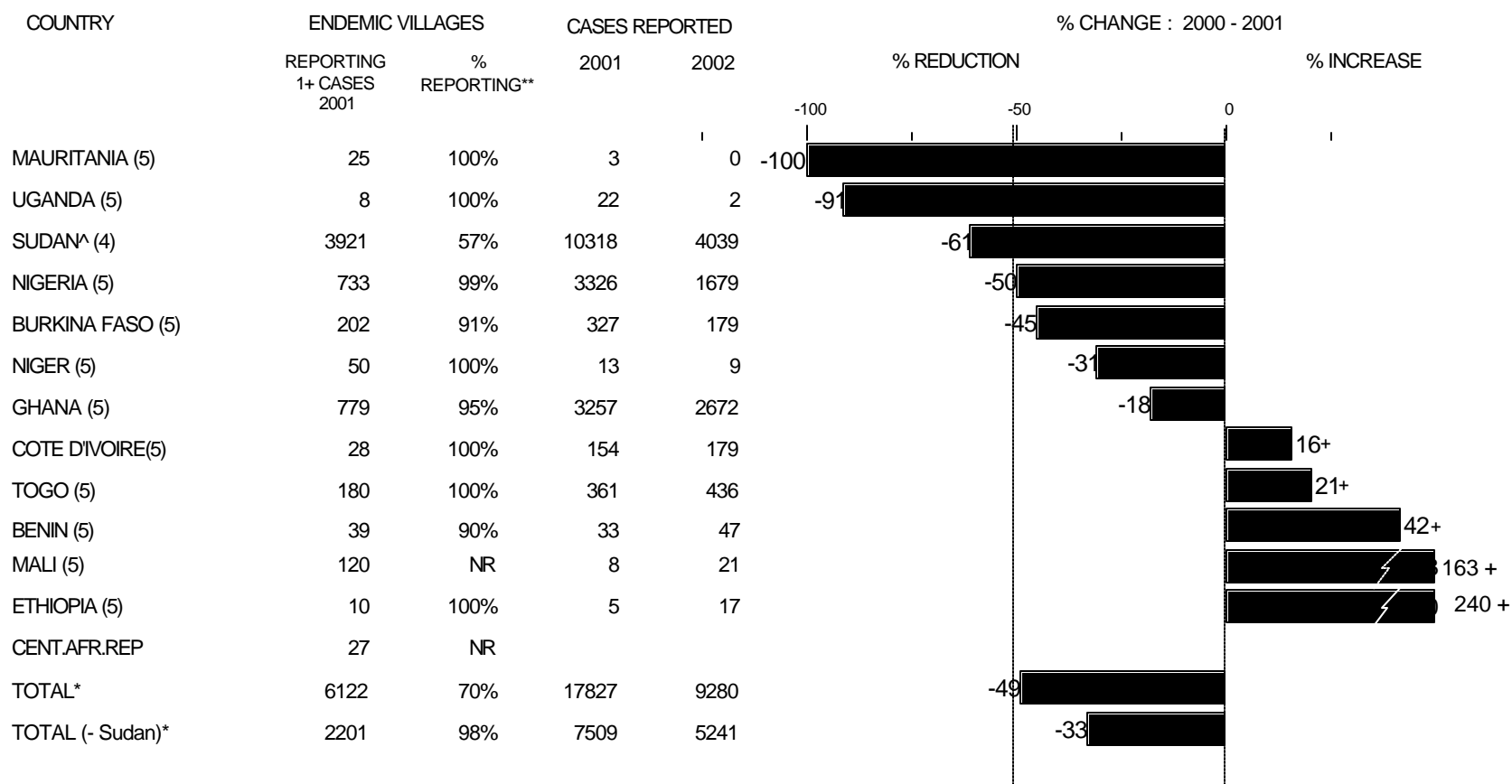
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Figure 1

## 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.



## 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 43<sup>rd</sup> 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 5<sup>th</sup> 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 (5<sup>th</sup>) 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							Total	Number of cases exported	
			Jan.	Feb.	Mar.	Apr.	May	June	July			
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.