



Date: December 17, 2001

From:



WHO Collaborating Center for
Research, Training and Eradication of Dracunculiasis

Subject:

GUINEA WORM WRAP-UP # 119

To: Addressees

WHAT'S NEW IN 2002?

WHAT'S NEW (OR DIFFERENT) IN 2002?

As we enter the New Year, it is time to review progress towards Guinea worm eradication in 2001 and assess what we shall do differently in order to improve programs' performances in 2002. So far, the endemic countries outside of Sudan have reduced their cases by -36%, from 18,121 cases reported in the first ten months of 2000 to 11,661 in the comparable period of 2001. Thus we can expect a reduction to about 12,000 cases in all of 2001 from the 20,000 cases reported outside of Sudan in all of 2000 (vs. 30,000 in 1999). Only four countries, however, have so far reduced their cases in 2001 by more than 50%, which should be the minimum annual reduction at this stage of the campaign (Figure 2). Nigeria and Ghana, the two highest-endemic countries after Sudan, continue to report significant progress, while Mali and Togo continue to suffer from failures in surveillance and containment in 2000, as manifested by new outbreaks and increased cases in parts of those two countries in 2001. Sudan has reported 80% of all cases so far in 2001.

We must do better. We know what we need to do: insure *proper supervision* of village-based health workers and *monthly monitoring of interventions* in order to achieve *active surveillance* and *effective containment and control measures* in each endemic country. The issue is, will we do it? 2002 is the last year of the support granted by the Bill & Melinda Gates Foundation for interrupting transmission in all countries outside of Sudan. Each endemic country needs to improve its performance in 2002. We do not know now how many cases will be reported in 2002, but whatever that number is, it is now beyond our control. Cases reported in 2002 will reflect the effectiveness of actions taken in 2001, because the average incubation period of dracunculiasis infection is twelve months. What we can control now are **supervision, surveillance, case containment, and monitoring of interventions**. At present, supervision is deficient and village-based health workers and volunteers are unmotivated in some of the highest endemic areas (that may be why they're still highly endemic), surveillance is often passive or absent, and case containment and control measures are inadequate and not monitored routinely. Only Nigeria, Ghana, Burkina Faso and Sudan are routinely monitoring and reporting on the status of their control measures monthly, for example.

What's new in 2002?

- Starting with this issue, *Guinea Worm Wrap-Up* will include monthly the latest status of interventions reported by each endemic country (Table 3). As recommended in the 2001 Program Reviews, National Program Coordinators are requested to submit information about the status of filter coverage, Abate usage, safe water supply and health education & community mobilization measures in each of their monthly reports, in addition to continuing to report the numbers of cases found and contained.
- The format for written and oral presentations at the next annual meeting of National Program Managers in Khartoum in March 2002 will be different. The new format will permit more detailed discussion of the problem endemic areas remaining, the status of control measures, case containment and active surveillance, and of what new or different activities each national program has begun or plans to do in order to stop transmission of dracunculiasis in 2002. (Instructions for preparing these reports will be sent to countries very soon.)
- On December 11, the Voice of America began airing brief Public Service Announcements (PSAs) on Guinea

worm eradication during its broadcasts to Africa, starting with a message by former U.S. President Jimmy Carter. As reported in our October issue, these PSAs, built around the theme “Think before you drink!”, will be broadcast in English, Hausa and French, and will include messages by General Amadou Toumani Toure of Mali and General Yakubu Gowon of Nigeria. These new airborne messages are intended to immediately assist programs in Nigeria, Benin, Togo, Ghana, and Cote d’Ivoire, which are in their peak transmission period now.

- And increasingly intensive diplomatic efforts are underway to help end the civil war in Sudan.

ERADICATION ESCALATION: NIGERIA, BENIN, TOGO, GHANA, AND COTE D’IVOIRE

The five endemic countries along the southern Atlantic seaboard (Nigeria, Benin, Togo, Ghana and Cote d’Ivoire) are beginning or in the midst of their peak transmission seasons. Each is taking steps to intensify interventions against dracunculiasis at this time, but they each face different challenges.

- **Cote d’Ivoire** has reported cases from only 27 villages so far in 2001, and only eight of those villages have reported 10 or more cases each (Table 2). The national coordinator, Dr. Henri Boualou, convened an Interagency Meeting on November 14 (apparently the first such meeting since January 2001) at which the ministries of health, water supply and education were represented as well as UNICEF, U.S. Peace Corps, MAP International and others. As recommended at the Program Review in Cotonou in October, this program and its partners need to secure and repair safe water sources in the highest endemic villages immediately, and also conduct a case search in un-endemic or no longer endemic districts urgently, in order to find and contain every case in 2002.
- **Ghana’s** Interagency Coordinating Committee meets monthly, and is emphasizing provision of safe water to as many endemic communities as possible, now that the other interventions are mostly in place. The highest endemic district of Nanumba, for example, is scheduled to receive 57 new bore hole wells in endemic communities between late 2001 and December 2002, with the help of the Japanese Embassy, NORWASP, UNICEF and VIP. In Atebubu District, 12 wells have just been rehabilitated in 7 endemic communities with funding provided by the Bill & Melinda Gates Foundation, through The Carter Center.
- Despite its current setbacks, the program in **Togo** recently started using “containment houses” to help keep active cases from contaminating water sources, including in Est Mono. It is also working with Peace Corps to conduct case searches and increase interventions (including local radio messages) in the northern part of the country.
- **Benin** has also begun using containment houses, and is working to control a new outbreak near Tchetti, on the border with Togo. The national program learned about this outbreak in late October because when the village-based health worker refused to report it, the villagers themselves went to the local radio station to announce on the radio that some of the inhabitants were suffering from Guinea worm disease! The program is implementing all control measures here, and The Carter Center is helping to repair two broken hand pumps and provide one new well in the area.
- **Nigeria’s** program has entered a new phase, with the aggressive support of the new Federal Minister of Health, Prof. A.B.C. Nwosu. As reported in our last issue, the Nigerian government is expected to fund Nigeria’s Federal Ministry of Water Resources and Rural Development to provide over 1,000 new water sources to endemic villages between now and 2003. The minister’s call for a “short, sharp, targeted” campaign has already begun to be realized with a new combined national line listing of endemic villages, which has been provided to the water ministry, and plans to begin conducting “Worm Weeks” and using containment houses in endemic southeastern foci.

The Carter Center is also providing increased technical assistance to all five countries during this peak season.

Table 1

**Number of cases contained and number reported by month during 2001*
(Countries arranged in descending order of cases in 2000)**

COUNTRY	NUMBER OF CASES CONTAINED / NUMBER OF CASES REPORTED													%
	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL*	
SUDAN	897 / 2423	1121 / 2296	958 / 2320	1390 / 3270	2090 / 5481	3372 / 7202	4114 / 7579	3032 / 5716	3576 / 6858	1596 / 2640	/	/	22146 / 45785	48
NIGERIA	675 / 1044	621 / 1031	423 / 730	170 / 267	208 / 248	214 / 317	247 / 368	245 / 332	143 / 195	111 / 147	207 / 283	/	3264 / 4962	66
GHANA	612 / 844	665 / 903	369 / 474	324 / 442	276 / 378	172 / 198	80 / 101	56 / 69	32 / 37	95 / 130	/	/	2681 / 3576	75
BURKINA FASO	18 / 20	25 / 29	35 / 37	38 / 61	116 / 188	138 / 194	83 / 125	56 / 70	66 / 102	93 / 114	31 / 39	/	699 / 979	71
NIGER	1 / 2	2 / 2	0 / 0	1 / 2	9 / 13	7 / 12	33 / 62	53 / 101	58 / 105	40 / 66	20 / 33	/	224 / 398	56
TOGO	108 / 119	65 / 92	58 / 70	43 / 48	16 / 24	21 / 50	24 / 50	23 / 52	17 / 38	115 / 265	/	/	490 / 808	61
MALI	3 / 6	0 / 0	0 / 0	0 / 0	1 / 2	1 / 2	21 / 55	114 / 193	88 / 134	55 / 179	/	/	283 / 571	50
COTE D'IVOIRE	18 / 40	18 / 60	11 / 38	5 / 6	4 / 11	7 / 8	4 / 5	8 / 9	8 / 8	0 / 0	/	/	83 / 185	45
BENIN	12 / 17	13 / 14	7 / 7	3 / 3	1 / 1	0 / 0	1 / 1	0 / 0	6 / 6	8 / 8	/	/	51 / 57	89
MAURITANIA	1 / 1	0 / 0	1 / 1	0 / 0	0 / 1	3 / 3	17 / 25	7 / 20	15 / 29	4 / 8	/	/	48 / 88	55
UGANDA	0 / 0	0 / 0	0 / 0	3 / 3	6 / 19	15 / 17	5 / 9	1 / 1	3 / 4	1 / 1	/	/	34 / 54	63
ETHIOPIA **	0 / 0	0 / 0	0 / 0	1 / 1	2 / 5	4 / 7	2 / 2	2 / 3	5 / 5	4 / 4	1 / 2	/	21 / 29	72
C.A.R.	0 / 0	0 / 0	0 / 0	0 / 1	0 / 1	2 / 5	2 / 4	1 / 1	0 / 1	/	/	/	5 / 13	38
KENYA	0 / 0	0 / 0	0 / 0	1 / 1	0 / 0	1 / 1	1 / 1	4 / 4	/	/	/	/	7 / 7	100
TOTAL*	2345 / 4516	2530 / 4427	1862 / 3677	1979 / 4105	2729 / 6372	3957 / 8016	4634 / 8387	3602 / 6571	4017 / 7522	2122 / 3562	259 / 357	0 / 0	30036 / 57512	52
% CONTAINED	52	57	51	48	43	49	55	55	53	60	73		52	

* PROVISIONAL

** 1 / 1 case reported in April, 3 / 5 cases in May, 5 / 6 in June, 1 / 2 in July, 4 / 5 in September, 2 / 4 in October, and 2 / 2 in November were imported from Sudan. Shaded cells denote months when zero indigenous cases were reported. Numbers indicate how many imported cases were reported that month.

Table 2

Cote d'Ivoire Guinea Worm Eradication Program
Partial Line-Listing of 8* Top Endemic Villages Reporting Cases During Jan. - Nov. 2001**

Village Name (District)	Population	# of Cases Jan. - Oct.	ASC June '01	Filters Jan. 01, Dec 01	Abate	Water Supply***	Health Education Community Mobilization
Broukro - Banon (Tanda) Cases Jan. - Apr., Nov '01	300pop.; 50 h/h	38	2	100%, 100%	Jan. - June, Nov.	0	Worm Day 4/2001 Worm Week 6/2001
N'Dakro- Bona (Tanda) Cases Jan. - Mar.'01	2000 pop.; 335 h/h	36	2	28%, 100%	Jan. - June, Nov.	1+,2- MAP repair 2?	Worm Day 4/2001 Worm Week 6/2001
Dodoassue (Tanda) Cases Jan. - Apr., Nov '01	1136 pop.;190 h/h	25	2	53%, 100%	Jan. - June, Nov.	1+,1- MAP repair 2?	Worm Day 4/2001 Worm Week 6/2001
Kouakou Krakro (Bondoukou) Cases Jan. - Mar. '01	2015 pop.; 336 h/h	17	6	>33%,	Jan. - June, Nov.	1+,3- MAP repair 2?	Worm Day 4/2001 Worm Week 6/2001
Wankro (Divo) Cases Jan. - Feb., May-June '01	200 pop.; 33 h/h	15	yes	100%,	Jan. - Aug.	1+	
Lenagnora (Bouna) Cases June-Sept. '01	792pop.; 132 h/h	14	2	100%,	Jan. - Aug.	1+	Worm Week 6/2001
Timbo (M'bahiakro) Cases Mar.-Apr., Aug.-Sep. '01	792pop.; 132 h/h	10	2	100%,	Jan. - Aug.	1+	Worm Day 4/2001
Arrah & Camps (Dimbro) Cases May-July '01	7000 pop.; 60 h/h	10					21

* 27 Villages reported cases in January - November 2001, 8 of them new (includes top 3 villages), 5 reinfected.

** Provisional

***1+ = 1 well, working; 1- = 1 well, not working.

Table 3

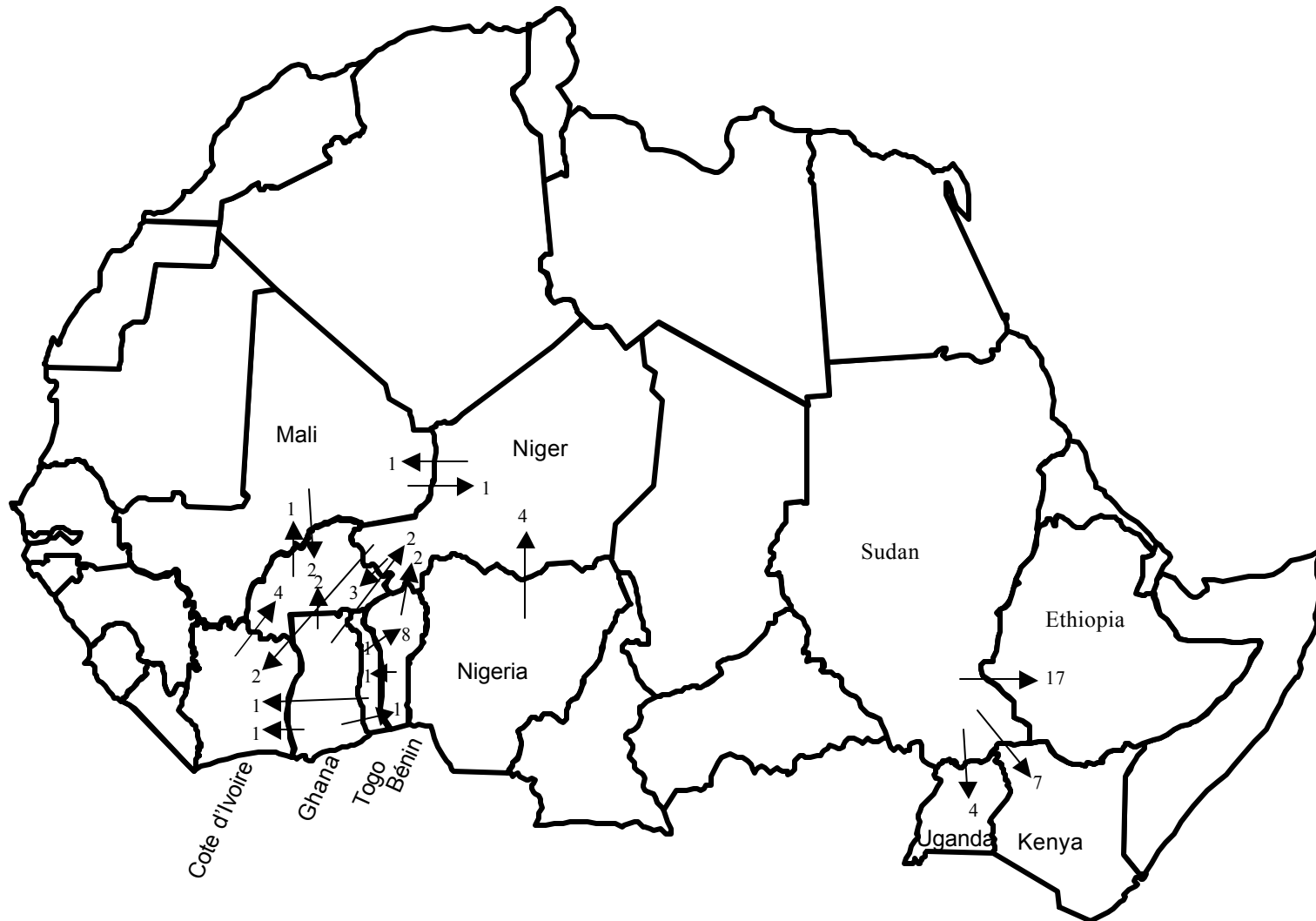
Status of Interventions Against Dracunculiasis, 2001*

Country	Month of Report	# Villages reporting 1+ cases in 2001	% of Endemic Villages					
			Reporting Monthly	100% hh with Filters	Using Abate	1+ source safe water	H.E. C.M.	% Case Containment
Sudan	Sept	3238	43%	32%	1%	45%	54%	48%
Nigeria	Oct	690	99%	84%	54%	45%		65%
Ghana	Sept	523	98%	77%	12%	42%	43%	75%
Burkina Faso	Sept	125	88%	100%	87%	78%		71%
Togo	Sept	112	100%	100%	100%	52%		61%
Mali	Sept	73	92%	88%	15%	NR		50%
Niger	Sept	54	100%	100%	78%	25%		56%
Cote d'Ivoire	Sept	26	100%	100%	73%	89%		45%
Mauritania	Sept	21	100%	100%	43%	76%		55%
Uganda	Sept	14	100%	NR	NR	NR	NR	63%
Benin	Sept	19	94%	58%	74%	79%		89%
Ethiopia	Sept	15	100%	75%	75%	45%	100%	74%
Central Af. Rep.	Sept	8						34%
Total		4918	59%					

* Provisional

Dracunculiasis Eradication Campaign

Reported Importations of Cases of Dracunculiasis: Jan. – Oct. 2001



IN BRIEF:

Burkina Faso. U.S. Peace Corps plans to help the national Guinea Worm Eradication Program to conduct 14-15 Worm Weeks in 2002, phased from January to September, according to the peak transmission seasons in different areas. UNICEF is preparing to help repair wells in endemic villages throughout the country.

Ethiopia has so far reported ZERO indigenous cases in South Omo District in January-November 2001! South Omo reported 18 of the 55 indigenous cases that Ethiopia reported in 2000. Only 9 indigenous cases have been reported in 2001, all from Gambella Region. [Watch out for surprises in areas bordering Sudan!]

Mali. Former head of state General Amadou Toumani Toure will lead a delegation to Gao on December 20-26 to investigate the recently recognized outbreak there (see last month's issue), and to help mobilize government officials and the inhabitants who are at risk. Three US Peace Corps volunteers in Gao plan to help with the distribution of filters, social mobilization, eg., "guinea worm weeks", and other program interventions.

Mauritania has a new National Program Coordinator. He is Dr. Sidi M'hamed Ould LEBATT. The previous coordinator, Dr. Abderramane Ould KHARCHI, has accepted a new post, with WHO. Welcome Dr. Lebatt! And thank you, Dr. Kharchi!

Niger. Drilling has begun for the ten new wells to be provided in Zinder Region's Mirriah District with funding provided by the UN Foundation, through The Carter Center. As of late November, two wells were already drilled and the third was underway.

Uganda held its annual National Guinea Worm Day celebration on October 31 in Panyangara sub-county of Kotido District. The guest of honor was the Minister of Health, the Honorable Brigadier Jim K. Mutwezi. Also present were representatives of other Ugandan government agencies; representatives of the embassies of Japan, Italy and Norway; World Vision, UNICEF, and WHO. The minister visited two endemic villages during his tour of the area. The village (Rikitae) chosen for the ceremony has reported 81% of Uganda's cases in 2001.

MEETINGS

President Jimmy Carter spoke at a special symposium on the international health activities of The Carter Center that was presented at the annual meeting of the American Society of tropical Medicine and Hygiene in Atlanta on November 15th. Dr. Ernesto Ruiz-Tiben and Mr. Craig Withers of The Carter Center described the Guinea worm eradication campaign and The Center's political and health work in Sudan, respectively, during the two-hour session.

The Seventh Meeting of National Program Coordinators of Dracunculiasis Eradication Programs will be held in Khartoum, Sudan on March 4-6, 2002. The head of state of Sudan President Omar Al-Beshir, has agreed to open the meeting, which President Jimmy Carter, General Amadou Toumani Toure, General Yakubu Gowon, and the regional directors for WHO's African and Eastern Mediterranean offices are expected to attend. This meeting will be co-sponsored by The Carter Center, the Federal Ministry of Health of Sudan, UNICEF, and the World Health Organization.

GUINEA WORM ON THE AIRWAVES

In addition to the new Public Service Announcements on the Voice of America, which began airing in December, Guinea worm is the subject of two recent television pieces. The United Nations has prepared a 5-minute long video entitled "World Unites to Rid Africa of Dreaded Guinea Worm." Support for producing the video was provided by a grant from the UN Foundation. And Dr. Ernesto Ruiz-Tiben is featured in a segment of the television show Ripley's

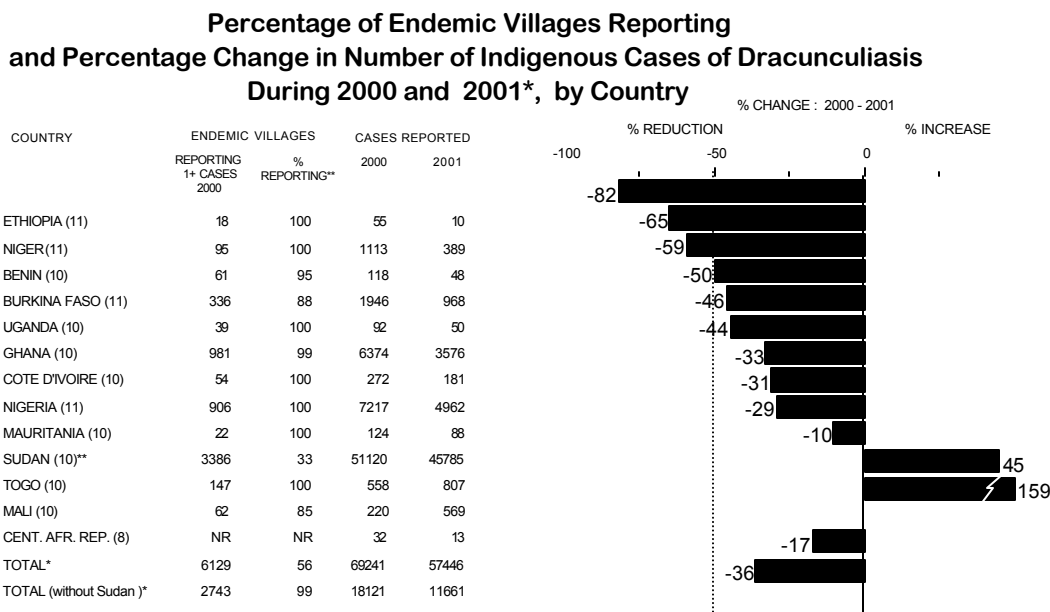
Believe It or Not, which describes Guinea worm disease. That program will be televised nationally in the United States on February 6, 2002.

DEFINITION OF CASE CONTAINMENT

A case of Guinea worm disease is contained if **all** of the following conditions are met:

1. The patient is detected before or within 24 hours of worm emergence; **and**
2. The patient has not entered any water source since the worm emerged; **and**
3. The village volunteer has properly managed the case, by cleaning and bandaging until the worm is fully removed, and by giving health education to discourage the patient from contaminating any water source (if two or more emerging worms are present, the case is not contained until the last worm is pulled out); **and**
4. The containment process, including verification that it is a case of Guinea worm disease, is validated by a supervisor within 7 days of the emergence of the worm.

Figure 2



* provisional

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

(10) Indicates month for which reports were received, i.e., Jan. - Oct. 2001

NR No Report

*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.



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