



Date: July 16, 2001

From:

WHO Collaborating Center for  
Research, Training and Eradication of Dracunculiasis

Subject:

GUINEA WORM WRAP-UP # 114

To: Addressees

**Detect Every Case (within 24 hours), Contain Every Worm (immediately)!****STATUS OF INTERVENTIONS IN SEVEN KEY DISTRICTS IN THE MOST ENDEMIC COUNTRIES OUTSIDE OF SUDAN**

Table 1 summarizes the status of interventions in the highest endemic district of each of the seven highest endemic countries outside of Sudan. These seven districts together reported 21% (4,197) of all cases of dracunculiasis outside of Sudan in 2000. They also include 17% of all cases reported outside of Sudan so far in 2001. The percentage of the respective national total of cases that was found in these districts ranged from 16% each in Ohaukwu, Nigeria and Nanumba, Ghana to 62% in Mirriah, Niger in 2000, and from 11% in Ohaukwu, Nigeria to 76% in Tanda, Cote d'Ivoire so far in 2001. These key districts are also major sources of cases exported to non-endemic and less-endemic parts of the same country, as well as a threat to neighboring countries. These should thus be high priority areas for ensuring maximal implementation of village-based interventions and of containment of individual cases. The data on the status of interventions is shown in the right-hand columns of Table 1. One concern is that these data on the status of interventions are not readily available for some of these areas (blank areas on the table), despite their priority status. The data we do have indicates that endemic villages in at least three of the districts have achieved excellent coverage rates for cloth filters. The case containment rate of only 24% in Cote d'Ivoire's Tanda District is a big flaw that needs to be corrected immediately, but may have allowed significant transmission to continue there already this year. The case containment rate of 60% in Nigeria's Ohaukwu Local Government Area also should be improved.

Table 1

**Districts Reporting Most Cases of Dracunculiasis in 7 Countries in 2000, Numbers of Cases Reported so far in 2001, and Coverage of Endemic Villages with Key Interventions in 2001\***

District or LGA, Country**	Year 2000			Surveillance & containment in 2001		Status of interventions in 2001 (% of endemic villages)		
	Number of cases reported	% of national total	Number of endemic villages	Number of cases reported	% of cases reported contained	All households with cloth filters	Treated with Abate	With safe water
Ohaukwu, Nigeria (6)	1293	16%	67	383	60%	98%	61%	29%
Nanumba, Ghana (5)	1182	16%	134	476	73%	100%	19%	64%
Mirriah, Niger (6)	726	62%	62	10	90%	100%		
Kaya, Burkina Faso (5)	446	23%	70	111	84%	100%		92%
Ogou, Togo (6)	384	46%	55	109	92%	100%		
Tanda, Cote d'Ivoire (5)	86	29%	11	117	24%		36%	90%
Ghourma Rharous, Mali (4)	80	27%	7	5	80%			

\* Provisional

\*\* Numbers in parenthesis denote the number of months for which data has been received, e.g., (5) = January - May, 2001

In January-May 2001, Mirriah, Ohaukwu, and Nanumba have reduced their cases by -88%, -65%, and -52%, respectively, from the same period of 2000. The reduction in Mirriah contributed to Niger's overall reduction of -90% in cases nationwide in June, which is the first month of Niger's peak transmission season this year.

## SUDAN: TIGHTENING THE RING

Sudan has transported all nine million pipe filters to distribution points throughout the country (see *Guinea Worm Wrap-up #113*). A total of 9.2 million pipe filters were manufactured with the materials that were made available. Some of the Ethiopian, Kenyan and Sudanese workers who were hired to make the pipe filters in Nairobi report that they used their earnings from this temporary employment to begin their own on-going income-generating projects, to pay school fees for their children, or to buy food or clothing. So far this year, 281,255 filters for household use also have been distributed in the areas accessed through Operation Lifeline Sudan, which is the highest number ever distributed before the rainy season in Sudan. In January-May, the northern states of Sudan reported 6 indigenous and 6 imported cases, in 8 villages, as compared to 3 indigenous and 11 imported cases (from southern Sudan) during the same period of 2000. Five (42%) of this year's 12 cases were contained. Sudan has exported more cases to other countries from its southern states than any other endemic country so far this year (Figure 2): 9 to Ethiopia and 3 to Kenya. Sudan has agreed to host next year's meeting of national program coordinators in Khartoum in March.

## DONATED HEALTH KITS EN ROUTE TO GHANA AND NIGERIA

**Johnson & Johnson**



**DFID** Department for International Development

Three thousand of 6,000 health kits for providing case containment to persons with dracunculiasis are about to be shipped to the national Guinea Worm Eradication Programs of Ghana and Nigeria (1,500 kits for each program). The contents and a plastic bag for each kit were donated to The Carter Center last year by the pharmaceutical firm **Johnson & Johnson**, which is headquartered in New Jersey. The kits were recently assembled by employees from the retail giant **Home Depot** of Atlanta. **Bell Logistics Services** of Atlanta donated the warehousing and logistics. Up to \$30,000 in funding for shipping ten pallets containing the first 3,000 kits by air, and the remainder by sea has been donated by the United Kingdom's **Department for International Development (DFID)**. The air shipments are expected to arrive on August 1.

Table 2

Box Score	Ghana (May)	Nigeria (June)
Cumulative # endemic villages (EVs)	1,161	1,061
% EVs reporting	99%	99%
% EVs with 100% filters	69%	88%
% EVs using Abate	25%	29%
% EVs with any safe water	49%	52%
% of cases contained	73%	68%
% reduction in cases in month indicated*	-37%	-30%

\* compared to same months in 2000.

## **IN BRIEF:**

**Ethiopia** has reported only 3 indigenous cases in January-June, which includes three of the five months of peak transmission in that country. South Omo has so far reported ZERO cases this year. Dr. Ahmed Tayeh from WHO is scheduled to visit the Ethiopian program beginning July 15.

**Burkina Faso.** Projects by the Japan International Cooperation Agency (JICA), UNICEF and ECLA have recently completed drilling or rehabilitating ~50, 15 and 10 wells, respectively, in endemic villages. UNICEF is also funding performance of theater presentations and songs about Guinea worm disease in the highest endemic villages, and received a grant of \$300,000 from the United Nations Foundation to assist the program during the year beginning August 2001. Mr. Harry Godfrey of Global 2000/The Carter Center provided technical assistance (June 4-July 5) in association with Global 2000's resident technical advisor to the Burkinabe program Mr. Raymond Stewart.

**Mali.** Mr. Brad Barker, Global 2000/The Carter Center's resident technical advisor in Mali since March 1997, has returned to the United States to attend graduate school at Johns Hopkins University. The new resident technical advisor in Mali is Dr. Mamadou Bathily, who formerly worked with the regional Guinea Worm Eradication Program in Kayes since 1993 WELCOME Dr. Bathily! THANKS and BEST WISHES to Brad Barker!

**Nigeria & Niger** are introducing a reward system for reporting of cases in Dogon Douthi District of Niger's Dosso region, and in Birnin Kebbi Local Government Area of Nigeria's Zamfara State. Both are non-endemic areas that border each other. Nigerian former head of state General (Dr.) Yakubu Gowon visited Kogi State in June, as part of his intensive on-going advocacy on behalf of Nigeria's program. The governor of Kogi State promised to provide three borehole wells in each of the three remaining endemic villages in the state within one month.

**Ghana.** Six of the highest endemic communities of Brong-Ahafo Region's Atebubu District have one new borehole each that were drilled by Heisa Engineering, which is based in Accra. The managing director of the company, Mr. Joseph Kippo, contributed one of the six boreholes. The others are the first five of a total of ten wells being supported by funding from the Bill & Melinda Gates Foundation to The Carter Center/Global 2000. Drilling for the other five wells has been suspended because of the rains. The six successful boreholes are being fitted with hand pumps. In Northern Region's Yendi District, Advocacy by Mr. Mohamed Adam (District Guinea Worm Coordinator) and Dr. John Abenyeri (District Director of Health Services) had a successful outcome on the District Assembly and the Director of the Church of Christ. As a result, ten (10) boreholes were drilled in Guinea Worm endemic villages during May 2001! Now only 3 of the top 20 endemic villages in Yendi District have no safe source of drinking water.

**Uganda.** The GWEP in Uganda suffered a setback this year when an outbreak of dracunculiasis suddenly became apparent in the village of Rikitiae, Kotido District, from which only 5 cases (all reportedly contained) were reported during 2000. According to National Coordinator, Dr. J.B. Rwakimari, in September 2000 the GWEP learned that this village was allegedly keeping secret the presence a pond in their cultivation area for the practice of witchcraft. Upon investigation (in September 2000) the villagers refused to have the pond treated with Abate, and one month of negotiations between the villagers, the political authorities in Kotido District, and the GWEP elapsed before the villagers agreed to have the pond treated with Abate. A total of 19 cases were reported from Rikitiae in May 2001 and 16 so far, in June (see Table 2). The UGWEP has intensified health education, community mobilization, applications of Abate, filter distribution, and supervision by the district health team. Moreover, the UGWEP has been adversely affected by increased insecurity this year in Kotido and Moroto Districts and by insufficient funding for program activities.

Table 3

**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												TOTAL*	% CONT.
	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER		
SUDAN	858 / 2250	1043 / 2002	849 / 1908	895 / 2027	774 / 1836	/	/	/	/	/	/	/	4419 / 10023	44
NIGERIA	673 / 1042	813 / 1051	423 / 730	170 / 267	208 / 248	214 / 317	/	/	/	/	/	/	2501 / 3655	68
GHANA	612 / 845	672 / 919	362 / 474	322 / 440	299 / 377	/	/	/	/	/	/	/	2267 / 3055	74
BURKINA FASO	18 / 20	25 / 29	35 / 37	38 / 61	113 / 185	/	/	/	/	/	/	/	229 / 332	69
NIGER	1 / 2	2 / 2	0 / 0	1 / 2	9 / 13	7 / 12	/	/	/	/	/	/	20 / 31	65
TOGO	108 / 119	63 / 91	58 / 66	43 / 48	16 / 20	19 / 37	/	/	/	/	/	/	307 / 381	81
MALI	3 / 6	0 / 0	0 / 0	0 / 0	1 / 2	1 / 2	/	/	/	/	/	/	5 / 10	50
COTE D'IVOIRE	18 / 40	18 / 60	11 / 38	5 / 6	2 / 9	/	/	/	/	/	/	/	54 / 153	35
BENIN	13 / 17	13 / 13	6 / 6	3 / 3	1 / 1	/	/	/	/	/	/	/	36 / 40	90
MAURITANIA	1 / 1	0 / 0	0 / 1	0 / 0	0 / 1	3 / 3	/	/	/	/	/	/	4 / 6	67
UGANDA	0 / 0	0 / 0	0 / 0	3 / 3	6 / 19	15 / 16	/	/	/	/	/	/	24 / 38	63
ETHIOPIA **	0 / 0	0 / 0	0 / 0	1 / 1	2 / 5	6 / 6	/	/	/	/	/	/	9 / 12	75
C.A.R.	/	/	/	/	/	/	/	/	/	/	/	/	0 / 0	
TOTAL*	2305 / 4342	2649 / 4167	1744 / 3260	1481 / 2858	1431 / 2716	265 / 393	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	9875 / 17736	56
% CONTAINED	53	64	53	52	53	67							56	

\* PROVISIONAL

\*\* 3 / 5 cases in May, and 5 / 6 in June were imported from Sudan.

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

Figure 1

## Percentage of Endemic Villages Reporting and Percentage Change in Number of Indigenous Cases of Dracunculiasis During 2000 and 2001\*, by Country

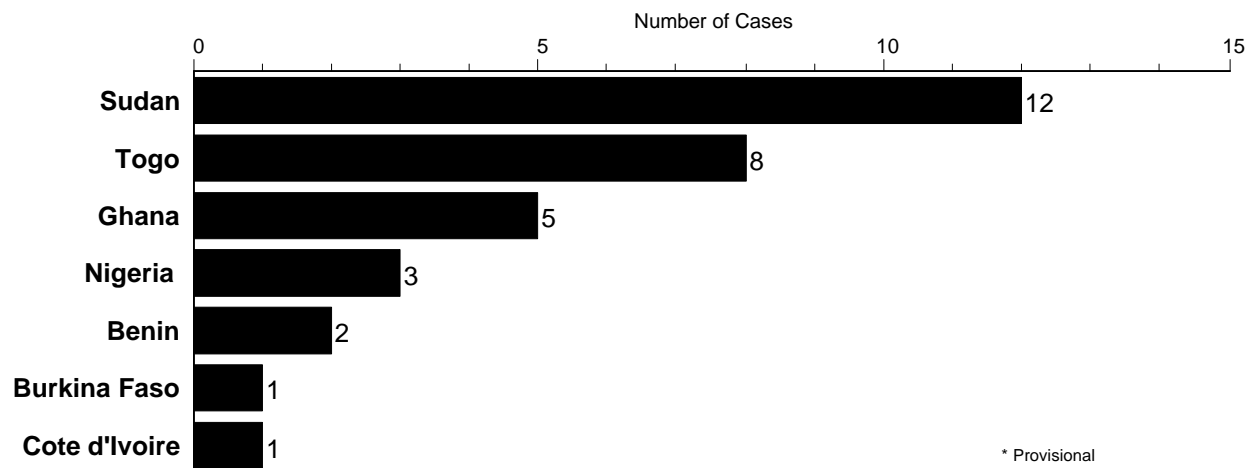


\* provisional

\*\* 2,600 (33%) of 7,898 endemic villages are not accessible to the program

Figure 2

**Distribution by Country of Origin of 32 Cases of Dracunculiasis Exported to Other Countries During 2001\***



**MEETINGS:**

Ghana's semiannual national Program Review will be held in Accra September 6-7, 2001.

The annual Program Reviews for Sudan, Ethiopia and Uganda will be held in Nairobi, Kenya October 1-2, 2001.

Nigeria's national review of Global 2000-assisted health programs, including the Guinea Worm Eradication Program, will be held in Nigeria October 23-25, 2001.

The tentative date for the annual Program Review for the 7 remaining endemic francophone countries is October 29-31, 2001. The location is not yet confirmed.

The Seventh Meeting of National Program Coordinators of Guinea Worm Eradication Programs will be held in Khartoum, Sudan in March 2002.

**RECENT PUBLICATIONS:**

Aminu SR, Yawe T, Tahir A. 2001. Ureteric fibrosis: a complication of guinea worm infestation of the retro peritoneum. *Tropical Doctor*. 31(2): 111-2.

Gyory, H. 2001. Emblem of medicine and dracunculiasis in Egypt. *Orvosi Hetilap*. 142(12): 652-4.

Hickman, MS, Miller D. 2001. Indigenous ways of healing guinea worm by the Soninke culture in Mauritania, West Africa. *Hawaii Medical Journal*. 60(4): 95-8.

## ADDRESS LIST: DRACUNCULIASIS ERADICATION NATIONAL PROGRAM MANAGERS IN AFRICA

### Benin

Dr. Aristide C. Paraiso  
Ministere de la Sante Publique, Cotonou  
Tel. (229) 33-21-41, Fax. (229) 33-21-41  
Email. [pevg\\_bj@leland.bj](mailto:pevg_bj@leland.bj)

### Burkina Faso

Dr. Dieudonne Sankara, PNEVG, Ouagadougou  
Tel. (226) 30-27-90, Fax. (226) 30-27-90  
Email. [pevg\\_bf@cenatrin.bf](mailto:pevg_bf@cenatrin.bf)

### Cameroon

Dr. Dama Mana  
Ministere de la Sante Publique, Ouagadougou  
Delegation Provinciale de la Sante Publique-  
Mora, Extreme Nord  
Tel. (237) 29-32-36, Fax. (237) 29-28-04/28-09

### Central African Republic

Dr. J. Ndoyo  
Ministre de la Sante Publique et de la Poptation, Bangui  
M. Gregoire Melemoko Ndiala, PNEVG  
Tel. (236) 61-59-61, Fax. (236) 61-70-99/61-17-09  
Email. [pnevg-cf@internet.cf](mailto:pnevg-cf@internet.cf)

### Chad

Dr. Gagde, Hinn-Dandje  
Ministere de la Sante Publique, N'Djamena  
Tel. (235) 51-52-37, Fax. (235) 51-44-65  
Email. [pneve@intnet.td](mailto:pneve@intnet.td)

### Cote d'Ivoire

Dr. Henri Boualou  
Direction de la Sante Publique, Abidjan  
Tel. (225) 06-54-73/93-17-24, Fax. (225) 22-50-63  
Email. [pnevgci@africaonline.co.ci](mailto:pnevgci@africaonline.co.ci)

### Ethiopia

Mr. Gezahegn Tesfaye  
MOH, Addis Ababa  
Tel/Fax. (251) 1-510-8977  
Email. [global2000@telecom.net.et](mailto:global2000@telecom.net.et)

### Ghana

Dr. Andrew Seidu Korkor  
Ministry of Health  
PO Box 99, Tamale  
Tel. (233) 71-22-53/22-89, Fax. (233) 71-22-777  
Email. [phd\\_nr@africaonline.com.gh](mailto:phd_nr@africaonline.com.gh)  
[Askorkor@excite.com](mailto:Askorkor@excite.com)  
[Askorkor@hotmail.com](mailto:Askorkor@hotmail.com)

### Kenya

Dr. David Sang  
MOH, Nairobi  
Tel. (254) 2-725-601, Fax. (254) 2-720-050  
Email. [mufhs@net2000ke.com](mailto:mufhs@net2000ke.com), attn: Dr. D. Sang

### Mali

Dr. Issa Degoga  
Ministere de la Sante Publique, Bamako  
Tel. (223) 22-37-87, Fax. (223) 23-17-21  
Email. [pevg\\_ml@datatech.toolnet.org](mailto:pevg_ml@datatech.toolnet.org)

### Mauritania

Dr. Abderhamane G. Kharchi  
Ministere de la Sante Publique, Nouakchott  
Tel. (222) 25-15-05/25-93-02, Fax. (222) 29-33-43  
Email. [pevg\\_mr@toptechnology.mr](mailto:pevg_mr@toptechnology.mr)

### Niger

Mr. Sadi Moussa  
Ministere de la Sante Publique, Niamey  
Tel. (227) 73-54-59/73-28-57, Fax. (227) 73-28-87  
Email. [g2000@intnet.nc](mailto:g2000@intnet.nc)

### Nigeria

Dr. K. A. Ojodu  
Federal Ministry of Health  
New Federal Secretariat  
Shehu Shagari Way  
Maitama, Abuja  
Tel./Fax. (234) 12-694-097

### Senegal

Mr. Georges N'Diaye  
PNEVG, Dakar  
Tel. (221) 824-74-34, Fax. (221) 824-35-32  
Email. [abecr@telecomplus.sn](mailto:abecr@telecomplus.sn)  
[pevgsn@telecomplus.sn](mailto:pevgsn@telecomplus.sn)

### Sudan

Dr. Nabil Aziz  
MOH, Khartoum  
Tel./Fax. (249) 11-785-536, Fax. (873) 161-04-41, (c/o  
UNDP)  
Email: [global@sudanet.net](mailto:global@sudanet.net)

### Togo

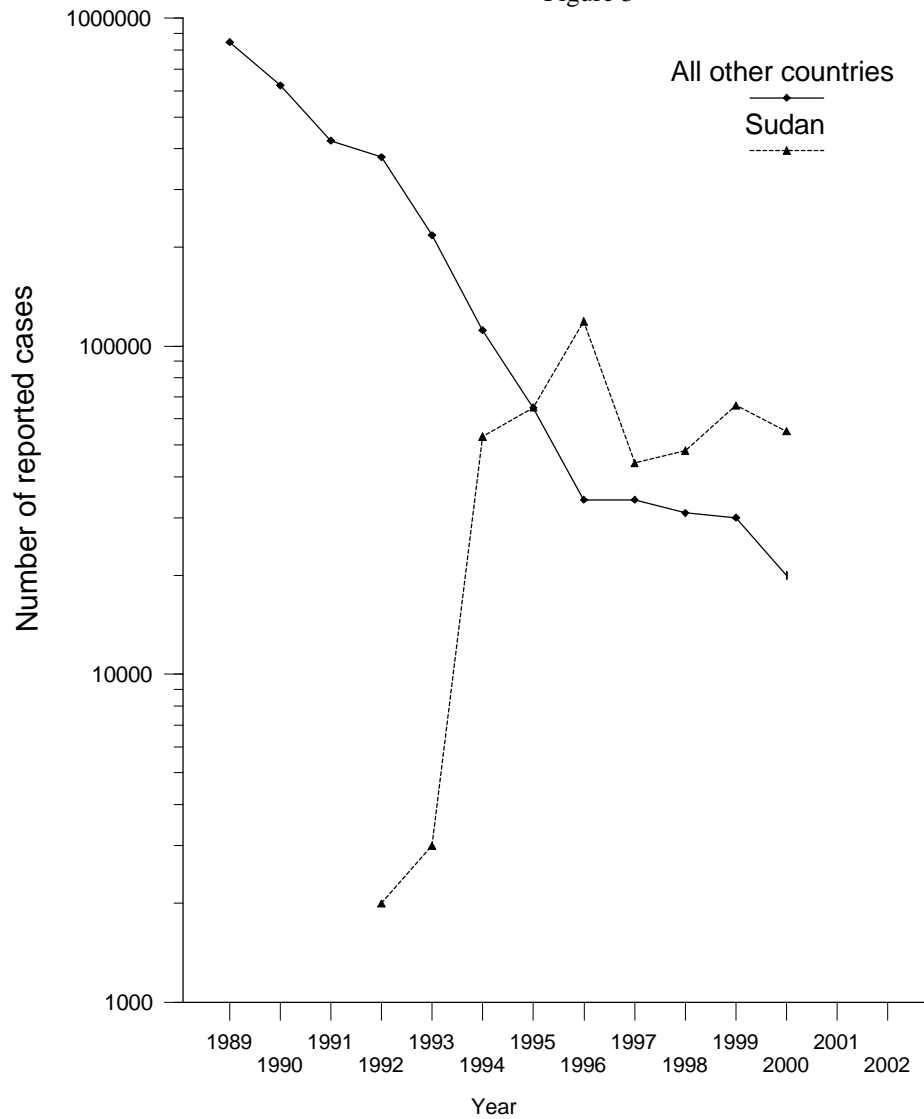
Mr. Ignace K. Amegbo  
Institut Nat. d'Hygiene, c/o UNICEF, Lome  
Tel. (228) 21-44-20, Fax. (228) 21-57-92  
Private Tel. (228) 25-99-28  
Email. [pevg\\_tg@bibway.com](mailto:pevg_tg@bibway.com)

### Uganda

Dr. John B. Rwakimari  
MOH, Entebbe  
Tel. (256) 41-231-564/42-207-19, Fax. (256) 42-206-08  
Email. [ugwep@swiftunganda.com](mailto:ugwep@swiftunganda.com)

## Number of Reported Cases of Dracunculiasis by year, 1989 - 2000

Figure 3



*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. Daniel Colley, Acting 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) 488-4532. 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.