



Date: June 15, 2001

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

Subject: GUINEA WORM WRAP-UP # 113

To: Addressees

**Detect Every Case (within 24 hours), Contain Every Worm (immediately)!**

**U.S. PEACE CORPS VOLUNTEERS ATTACK GUINEA WORM IN FIVE COUNTRIES**

U.S. Peace Corps Volunteers (PCVs) in at least five countries are escalating their efforts in support of national Guinea Worm Eradication Programs (GWEP). "Worm Weeks" have already been held or are planned for later this year in Burkina Faso, Cote d'Ivoire, Ghana, Niger, and Togo. The "Worm Week" methodology was developed by PCV Michael Kinzer in Niger five years ago. In it, PCVs and national counterparts spend a week living in endemic villages while conducting intensive health education and community mobilization, as well as demonstrating and distributing cloth filters. Associate Peace Corps Director Claude Milogo reports that 40 PCVs in **Burkina Faso** conducted their first Worm Week beginning April 16 this year in cooperation with the GWEP. The Worm Week was held in Ouahigouya District, which was Burkina Faso's second-highest endemic area in 2000. In **Cote d'Ivoire**, PCVs and the GWEP conducted Worm "Weeks" in Dabakala May 30-June 1, and in Bouna June 3-5, in advance of the peak transmission seasons there. Those two sanitary districts reported the 6<sup>th</sup> and 2<sup>nd</sup> highest number of cases, respectively in Cote d'Ivoire in 2000. This program has been funded by Global 2000 of The Carter Center to conduct fifteen "Worm Days" in the most endemic villages this year. Worm days were conducted in February-June 2001 in 12 endemic villages which contained over 70% of all cases. **Niger** conducted Worm Weeks in Mirriah (Zinder Region) and in Tera (Tillabery Region) Districts, the two highest endemic districts in the country, during the week of May 24-June 2 (in Mirriah) and May 24-31 (in Tera). In Mirriah, 30 teams of 21 U.S. and 13 Japanese volunteers (JOCVs) and their 34 Nigerien counterparts lived in 29 of the most endemic villages of the district. About 6,000 people were reached by these teams. In Tera 19 U.S., 1 JOVC, and 20 Nigerien counterparts lived in 20 of the most endemic villages for one week and reached about 8,000 people with their educational messages and distributed about 7,500 filters. A second Worm Week is planned for Zinder Region in late July or early August. The coordinators for Worm Week in Mirriah were Mr. Oumarou Brah and Dr. Siddo (ministry of health), Melissa McSwegin and Kelley Sams (PCVs), and Kaori Nishiyama (JOVC). In Tera the coordinator was Alison Mitchell (PCV), and Akiko Kageyama (JOVC). **Ghana's** PCVs and GWEP plan to hold a Worm Week in Nanumba, Ghana's highest endemic district, on October 6-13, 2001.

**Togo's** GWEP and PCVs plan to conduct their next Worm Week in Ogou, Haho and Yoto Districts July 30-August 4, 2001. These are the 1<sup>st</sup>, 3<sup>rd</sup>, and 6<sup>th</sup> highest endemic districts in Togo so far in 2001. With financial support from Global 2000/The Carter Center, PCVs in Togo have helped the inhabitants of 13 endemic villages of Ogou Prefecture to construct 14 hand-dug wells at a cost (for cement and other materials for lining the wells) of under \$100 per well. This low cost technology approach has thus helped provide safe drinking water to a significant proportion of Togo's remaining endemic villages quickly and inexpensively. They have also repaired four pumps, helped the GWEP to re-train 87 animators in 79 villages (Ogou, East Mono), conducted market place education sessions in 13 villages (Ogou, East Mono), trained 198 teachers in 63 schools (Ogou, East Mono), provided a theater group presentation in 18 villages (Ogou, East Mono), and ensured daily radio broadcasts of Guinea worm health education messages in five

local languages to all of Ogou and over half of Haho Districts throughout 2001. The report of Togo's PCV activities was provided by APCD Tchao Bamaze, and PCVs Roger Phillips, Kathleen Silliman, and Kim Williams. Bravo!! UNICEF/Togo supported additional theater group presentations, and also provid

GWEPs to adopt a policy of requiring all cases of dracunculiasis to be isolated either in a “containment house” in a centralized endemic village (if the nearest health post is too far away to make it practical for

Pakistan. *The Lancet*, Vol.346: 621-624.

4. Muller R. 1971. Dracunculus and dracunculiasis. *Advances in Parasitology*. Vol. 9: 73-151.

### **MORE THAN 8 MILLION PIPE FILTERS COMPLETED FOR SUDAN**

As of June 8, eight million of the projected 9 million pipe filters for Sudan had been completed by the teams of over 1,300 Kenyan, Sudanese and Ethiopian workers in Nairobi, and seven million of the filters had been shipped to distribution points in Sudan. The remaining filters are expected to be completed by mid-June. The filters are being distributed to all persons in at risk areas of Sudan to wear around their neck for quick availability and ease of use. They are being distributed by 39 international and indigenous Non-Governmental Organizations (NGOs), the Federal Ministry of Health, the Sudan Relief and Rehabilitation Association, RASS, FRRA, and United Nations Organizations. The partner NGOs, Global 2000 field officers, and radio broadcasts are being used to mobilize persons at risk of dracunculiasis throughout Sudan to use the pipe filters. A high level team of representatives of Hydro Polymers of Norsk Hydro (Mikkel Storm), Chemical Workers Union of Norsk Hydro (Jon Selmer), and Health and Development International (Dr. Anders Seim), and Norwegian Church Aid (Atnaf Kebreab), visited Khartoum (arrival of first shipment of pipe filters), Nairobi (manufacture of the pipe filters), Lokichokio Kenya (distribution) and Alek, Sudan (distribution and use of pipe filters, saw over 50 persons with Guinea worms) where they viewed the full scope of the ambitious project from May 13-22. To receive the first shipment of filters at Khartoum airport, the visitors were joined by a delegation of Sudanese officials, led by the Federal State Minister of Health, Mr. Mabyor Makoy. A press conference was held at the offices of The Carter Center in Nairobi on May 22. Reports of the project have so far appeared on the front pages of newspapers in Khartoum, Atlanta, Oslo, and Nairobi, as well as on Voice of America and British Broadcasting Corporation radio broadcasts and Sudanese radio and television. A story by the Associated Press is also expected soon. The major supporting partners for this project are Hydro Polymers of Norsk Hydro, Government of Norway, Health and Development International, Norwegian Chemical Workers Union, Norwegian Church Aid, and The Carter Center.

The only indigenous cases of dracunculiasis in East Africa during the first quarter of 2001 were in southern Sudan. The northern states of Sudan have reported 3 indigenous (all in April) and 4 imported (from southern Sudan) cases in January

LGAs are -35%, +198% and +4435%, respectively.

**Table 1**

Box Score	Ghana (April)	Nigeria (May)
Cumulative # endemic villages (EVs)	1,128	1,132
% EVs reporting	95%	100%
% EVs with 100% filters	22%	89%
% EVs using Abate	6%	35%
% EVs with any safe water	39%	53%
% of cases contained	73%	84%
% reduction in cases in month indicated	-33%	-61%

**IN BRIEF:**

Mauritania. National Program Coordinator Dr. Abderrhamane Ould Kharchi reports that this GWEP will hold a National Guinea Worm Day on June 14, 2001. Global 2000/The Carter Center is providing a grant of \$25,000 to help support surveillance and health education/community mobilization efforts, as well as filter material and Abate.

Cote d'Ivoire. Dr. Alhousseini Maiga of WHO consulted during a visit to this program on May 23-June 4. He met with ministry of health officials and representatives of the principal partners, and visited four sanitary districts and four endemic villages. He noted that only 25% of the 114 cases of dracunculiasis that have been reported from Tanda District so far this year were contained.

Niger and Nigeria's GWEPs held a cross-border meeting in Jos, Nigeria on May 30-June 2. About 25 officials from the two countries attended. Regions of Niger Republic that were represented included Maradi, Zinder, Dosso, and Madaoua. The Nigerian delegates included officials from the state ministries of health of Sokoto and Katsina, as well as Global 2000 personnel from national and zonal (NW and NE) levels. The two delegations reviewed implementation of recommendations from the previous meeting, exchanged data on imported cases and on the epidemiological situation and status of interventions along the borders, and discussed the reward system.

Uganda. National Program Coordinator Dr. John Bosco Rwakimari met briefly with Former U.S. President Jimmy Carter in Kampala during President Carter's visit to Uganda on June 7. President Carter congratulated Dr. Rwakimari on the dramatic progress of the Ugandan GWEP. Drs. Ahmed Tayeh and Alhousseini Maiga of WHO visited with the Dr, Rwakimari during mid May to assess the status of eradication efforts.

Kenya. Dr. Ahmed Tayeh, of WHO visited Kenya in late May and reports that 3 imported cases of dracunculiasis were detected sometime during January – May 2001 in the Turkana District. Two of the cases were Sudanese refugees and one case was a Turkana person who had a history of travel in endemic areas within southern Sudan during the preceding year.

Burkina Faso. UNICEF has rehabilitated 8 traditional wells in Niessega FS village of Ouahigouya Sanitary District. This was the second-highest endemic village in the country in 2000, reporting 74 cases.

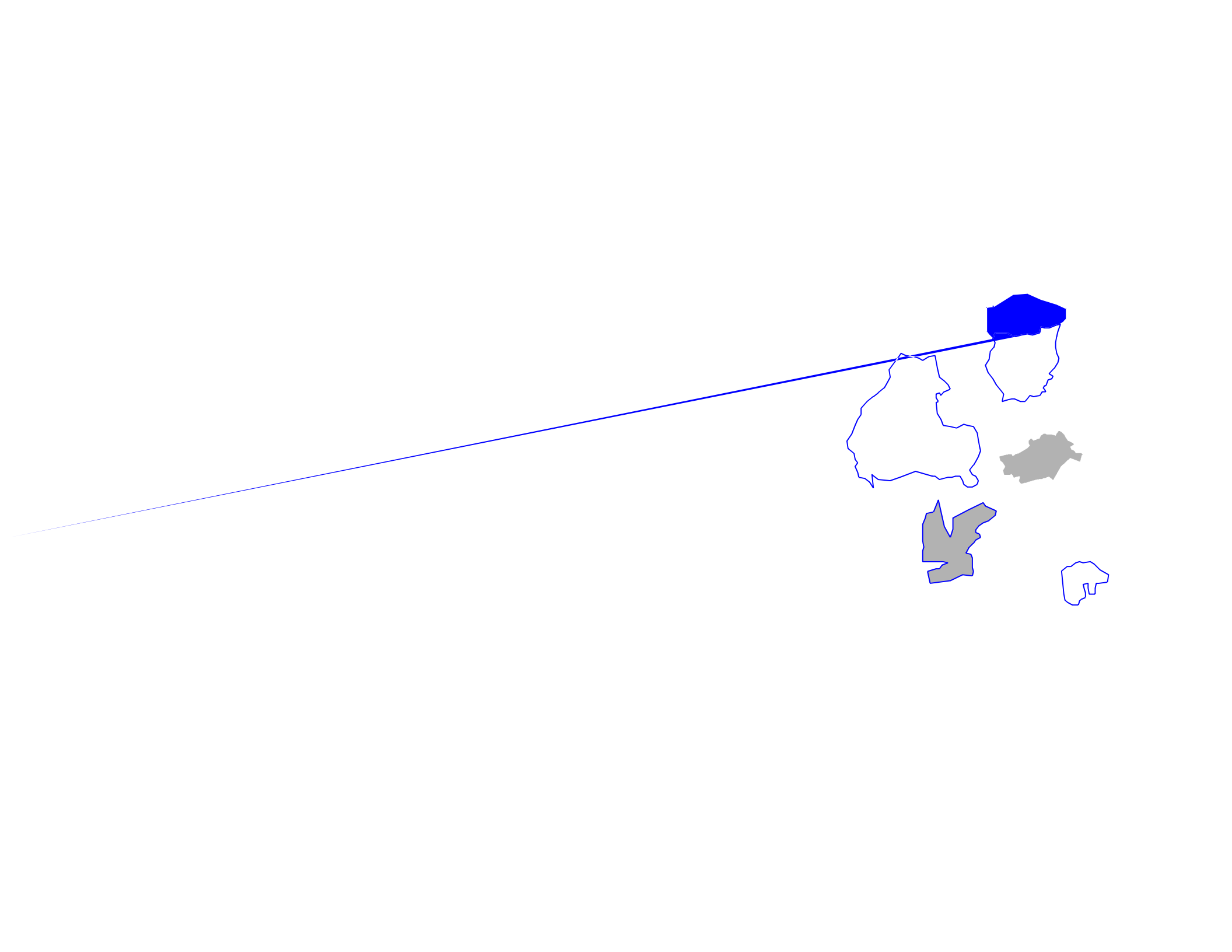


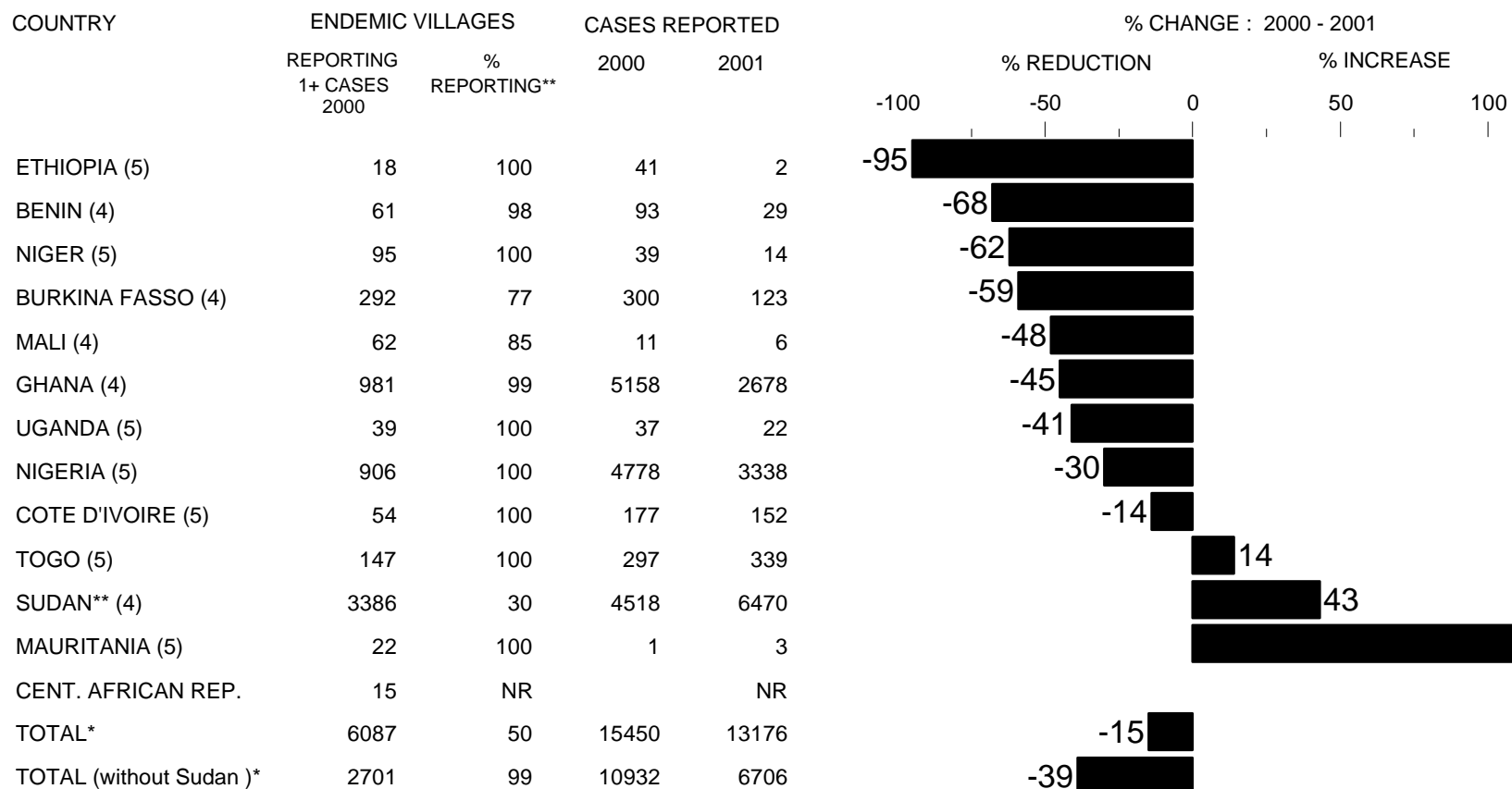
Table 2

**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	753 / 2052	886 / 1816	493 / 1600	410 / 1002	/	/	/	/	/	/	/	/	2542 / 6470	39	
NIGERIA	673 / 1042	813 / 1051	423 / 730	170 / 267	208 / 248	/	/	/	/	/	/	/	2287 / 3338	69	
GHANA	612 / 845	676 / 919	365 / 474	322 / 440	/	/	/	/	/	/	/	/	1975 / 2678	74	
BURKINA FASO	18 / 20	8 / 12	32 / 34	34 / 57	/	/	/	/	/	/	/	/	92 / 123	75	
NIGER	1 / 2	2 / 2	0 / 0	1 / 2	9 / 13	/	/	/	/	/	/	/	13 / 19	68	
TOGO	108 / 119	63 / 91	58 / 66	43 / 48	11 / 15	/	/	/	/	/	/	/	283 / 339	83	
MALI	3 / 6	0 /													



## Percentage of Endemic Villages Reporting and Percentage Change in Number of Indigenous Cases of Dracunculiasis



\* provisional

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



Table 3

**DRACUNCULIASIS ERADICATION CAMPAIGN  
REPORTED IMPORTATIONS AND EXPORTATION OF CASES OF DRACUNCULIASIS IN 2001**

From --> To	Month and number of cases imported												Total	Number of cases exported				
	Jan.	Feb.	Mar.	Apr.	May	Jun	Jul	Aug.	Sept	Oct	Nov	Dec.						
Togo --> Benin	5	1		1	1											8	Togo = 8	
Sudan --> Ethiopia					1	3											7	Sudan = 7
Sudan --> Kenya						3												
Ghana --> Benin		1																Ghana=2
Ghana --> Niger				1														
Benin --> Niger	2																	Benin=2
Nigeria --> Niger				1	1													Nigeria = 2
Burkina Faso --> Cote d'Ivoire					1													Burkina Faso=1
<b>Total</b>	<b>7</b>	<b>2</b>	<b>0</b>	<b>4</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>22</b>		



## **DEFINITION OF CASES 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.

## **CORRECTION AND UPDATE: UN FOUNDATION FUNDS FOR WATER SUPPLY IN NIGERIA**

We have received new information from UNICEF/Nigeria in response to the Editorial Note in *Guinea Worm Wrap-Up # 111* regarding delayed use of funding from the UN Foundation for providing safe water to Guinea worm endemic villages. The \$200,000 was only released to UNICEF/Nigeria “on 1 August 2000”, not before January 2000, as stated in the editorial. Moreover, we are informed that “\$171,434.75 had been committed by March 2001 in ordering hand pumps and other materials for repair of broken down pumps”. We regret the error, which reflected information available to other partners of the Nigerian program at the time. We hope to inform readers later of the endemic villages to be served by these hand pumps in a future issue.

## **INTERAGENCY MEETING AND MEETING OF GATES COMMITTEE**

UNICEF hosted the 41<sup>st</sup> Meeting of the Interagency Coordinating Group for Dracunculiasis Eradication at its headquarters in New York on May 29. Representatives of CDC, The Carter Center, WHO, World Bank, and U.S. Peace Corps attended, in addition to staff of UNICEF. The group agreed to convene a Program Review for francophone endemic countries in October this year. The Second Meeting of the Gates Guinea Worm Committee met immediately following the meeting of the Interagency Group. The Gates GW Committee includes representatives of WHO, The Carter Center, The World Bank, and UNICEF.

*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-*