DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service
Centers for Disease Control
and Prevention (CDC)
Memorandum

Date: February 21, 2003

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

Subject: GUINEA WORM WRAP-UP #130

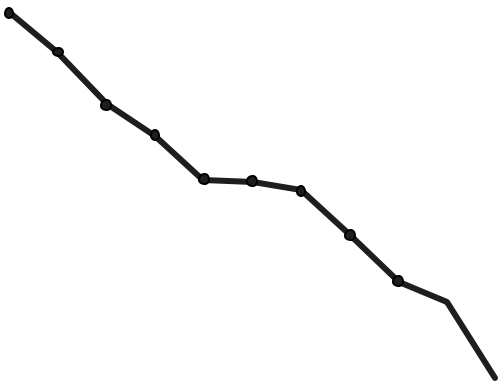
To: Addressees

What's New in 2003?

UGANDA INTERRUPTS GW TRANSMISSION IN RECORD TIME?

Uganda's Guinea Worm Eradication Program reported only 7 indigenous cases in 7 endemic villages, and 18 cases imported from Sudan during 2002. Eighteen (76%) of the 24 cases were reportedly contained - all in case containment centers. Thus, the indigenous case reported in Lorukumo village of Moroto District in December 2002 might be the final instance of indigenously transmitted dracunculiasis in Uganda. That patient, a 48-year-old woman, was confined in a local hospital from the swelling stage until the worm was completely removed. If no indigenous cases are reported in 2003, Uganda will become the first endemic country to interrupt transmission since Chad reported its last case in 1998. This is a remarkably rapid achievement for the Ugandan program, which recorded 126,639 cases in 2,677 endemic villages of 16 districts during its national case search in 1991-1992 (figure 1). Most cases (94.9%) were located in only three contiguous districts (Kitgum, Kotido, Moroto) in the northeast of the country (figure 2). Before the national village-by-village search, which was one of the last to be conducted among the endemic countries, Uganda had reported only 1,960 and 1,309 cases for the entire country in 1988 and 1989, respectively. When Uganda reported 42,852 cases of dracunculiasis in 1993, it ranked as the second-highest endemic country, exceeded only by Nigeria (75,752 cases), and followed by Niger (21,564) and Ghana (17,918). (Sudan's program did not get fully underway until 1995.)

Figure 1



The case search, which began in October 1991, was completed in the seven highest endemic districts by March 1992. Systematic interventions began following training courses held in Kitgum in May, and in Kotido and Moroto Districts in July 1992. By March 1993, 84% of the 2,677 endemic villages had a trained village-based health worker (VBHW) in place, health education had been conducted in 91%, and 76% were reporting monthly. By the time the first national conference was held in June, 96% of endemic villages had a trained VBHW and nylon filters had been distributed in over 45%. Filters were distributed in 64% of endemic villages by September 1993, in 67% by December 1994, and in 100% by October 1995. Consultants from CDC and Global 2000/The Carter Center helped train and equip VBHWs to

implement case containment beginning late in 1994, followed by use of Abate for vector control starting in February 1995. By then, it had become clear that the peak transmission season, which was unknown at the beginning of the program in Uganda, was April through July. UNICEF provided new or rehabilitated sources of clean drinking water to most of the priority endemic villages in Kitgum, Moroto and Kotido Districts, starting in 1997. A system of cash rewards for reporting of cases of dracunculiasis was introduced in low and non-endemic areas in mid-1997 (a year when Uganda reported 1,374 cases), and extended nationwide in 1999. The reward was increased to 20,000 Uganda shillings (~US$13) in 2000, and to 50,000 shillings (US$30) at the beginning of 2001. Uganda also pilot tested use of "case containment centers" to provide medical care and physically isolate patients in 2000. Twenty-eight of the 55 cases reported in 2001 were isolated in case containment centers (of 35 cases that were contained overall). The first dracunculiasis-free month was recorded in November 2000, and was followed by four successive months of no indigenous cases through March 2001.

The program experienced a small setback in 2001, when an outbreak was discovered in Rikitae village of Kotido District.

Table 1

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

(Countries arranged in descending order of cases in 2001)

NUMBER OF CASES CONTAINED / NUMBER OF CASES REPORTED

	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL*
SUDAN	674 / 1148	567 / 1103	607 / 1138	854 / 1612	2728 / 5422	3106 / 6429	3399 / 6597	1713 / 3628	2848 / 4391	1754 / 2994	846 / 1550	418 / 1011	19514 / 37023
NIGERIA	350 / 647	195 / 336	148 / 220	152 / 232	205 / 244	222 / 314	143 / 198	125 / 246	107 / 175	163 / 245	319 / 427	407 / 536	2536 / 1550

Table 2

Number of cases contained and number reported by month during 2003*

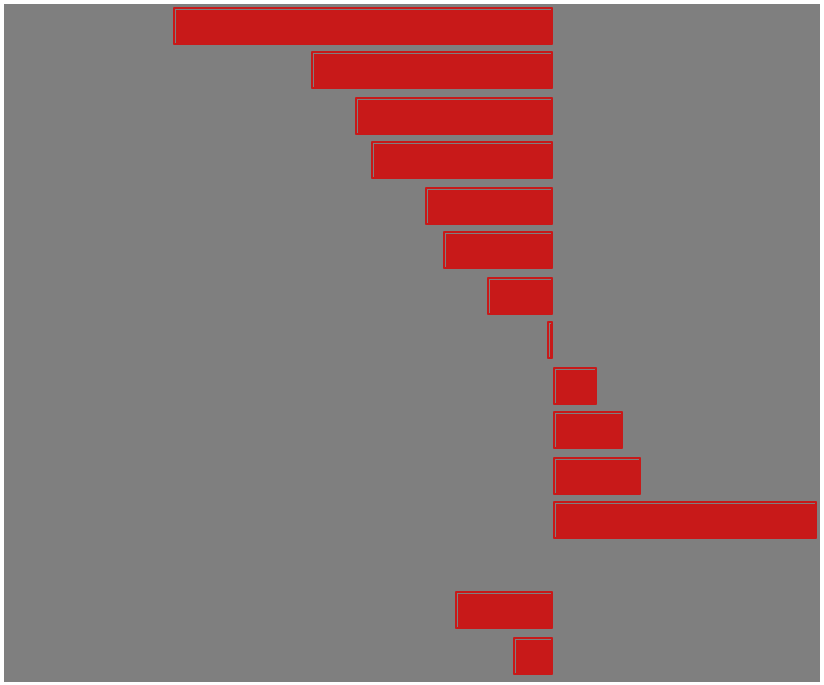
(Countries arranged in descending order of cases in 2002)

COUNTRIES REPORTING CASES	NUMBER OF CASES CONTAINED / NUMBER OF CASES REPORTED												
	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL*
SUDAN	/	/	/	/	/	/	/	/	/	/	/	/	0 / 0
GHANA	/	/	/	/	/	/	/	/	/	/	/	/	0 / 0
NIGERIA	389 / 568	/	/	/	/	/	/	/	/	/	/	/	389 / 568
TOGO	/	/	/	/	/	/	/	/	/	/	/	/	0 / 0
MALI	/ 3	/	/	/	/	/	/	/	/	/	/	/	0 / 3
BURKINA FASO	6 / 6	/	/	/	/	/	/	/	/	/	/	/	6 / 6
NIGER	0 / 0	/	/	/	/	/	/	/	/	/	/	/	0 / 0
COTE D'IVOIRE	7 / 21	/	/	/	/	/	/	/	/	/	/	/	7 / 21
BENIN	21 21	/	/	/	/	/	/	/	/	/	/	/	21 / 21
ETHIOPIA	0 / 0	/	/	/	/	/	/	/	/	/	/	/	0 / 0
MAURITANIA	/	/	/	/	/	/	/	/	/	/	/	/	0 / 0
UGANDA	0 / 0	/	/	/	/	/	/	/	/	/	/	/	0 / 0
ETHIOPIA	0 / 0	/	/	/	/	/	/	/	/	/	/	/	0 / 0
CAMEROON		/	/	/	/	/	/	/	/	/	/	/	0 / 0
KENYA	1 / 1	/	/	/	/	/	/	/	/	/	/	/	1 / 1
TOTAL*	424 / 620	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	424 / 620
% CONTAINED	68												68

* PROVISIONAL

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

For other imported cases see table of imported cases by month and by country.



Dracunculiasis has already been eliminated from most of Mali, except for the three districts named above. After the outbreak was discovered in August 2001, several interventions were begun in 2002, following General A.T. Toure's tour of the area i

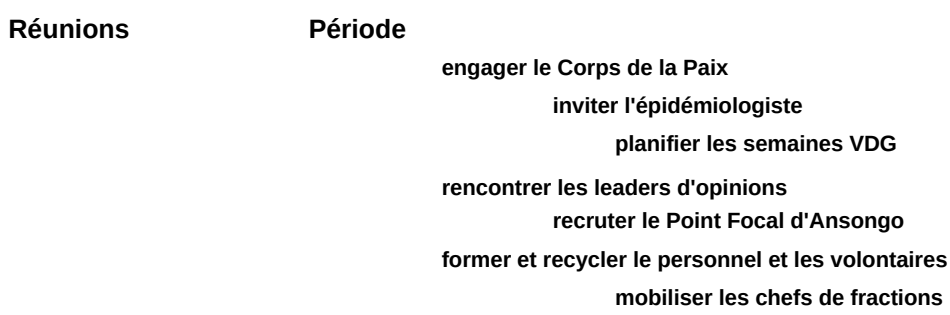
Figure 5

Summary of Interventions in Sudan, Ghana, Nigeria, Togo, and Mali

SUDAN	**2001**	**2002***	**What was new in 2002?**
EV with 100% filters	62%	69%	reduced cases by 27%
EV used Abate	2%	2%	distributed more h/h filters than ever (>1 m.)
EV with 1+ safe water	61%	59%	northern states reported 60 indigenous cases
EV health education	85%	92%	*weakest point: civil war*
% cases contained/managed	49%	53%	
% EV reporting	66%	70%	
83% of cases in 4 southern states			

GHANA	**2001**	**2001158895 TwD ( )6r**

Figure 4


Réunions
Période
engager le Corps de la Paix
inviter l'épidémiologiste
planifier les semaines VDG
rencontrer les leaders d'opinions
recruter le Point Focal d'Ansongo
former et recycler le personnel et les volontaires
mobiliser les chefs de fractions

Denmark Donates $700,000

The Royal Danish Ministry of Foreign Affairs has informed The Carter Center that it will contribute US$700,000 in support of the Center's Guinea worm eradication activities over the next two years. The Carter Center will use these funds to help stop transmission in the remaining endemic countries, with special attention to countries where Denmark is providing direct development assistance: Benin, Burkina Faso, Ghana and Niger.

Congratulations Dr. Joshua Olorunshola Ologe!

With great pleasure we recognize the extraordinary efforts of our colleague, Joshua Olorunshola Ologe, who despite a full work load combating Guinea Worm disease in the South West Zone of Nigeria, found time to successfully fulfill the academic requirements in November 2002 for a Doctor of Philosophy in Public Health Parasitology at the University of Ilorin, Nigeria. Well done Joshua!

Recent Publications

WHO, 2002. Dracunculiasis eradication review meeting, Nouakchott (Mauritania), 28-30 October 2002. Wkly Epidemiological Rec No. 45, 374.

WHO, 2003. Dracunculiasis eradication in endemic French-speaking African countries. Wkly Epidemiological Rec No. 1/2, 3-7.

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.