

DEPARTMENT OF HEALTH & HUMAN SERVICES

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

Date: June 16, 2006



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

Subject: GUINEA WORM WRAP-UP #163

To: Addressees

<u>Count Down to Glory</u> Consecutive months with zero indigenous cases: Ethiopia 9 Burkina Faso 5 World Cup Soccer: Ghana 2. Czech Republic 0

ENDEMIC COUNTRIES VOW TO END GUINEA WORM DISEASE BY 2009; WILL REPORT TO WORLD HEALTH ASSEMBLY EACH YEAR



During this year's World Health Assembly (WHA) in Geneva, the World Health Organization (WHO) convened an Informal Meeting on eradication of dracunculiasis (Guinea worm disease) on May 25th. The two-hour long meeting, which was co-chaired by the directors of WHO's Eastern Mediterranean (EMRO) and African (AFRO) regional offices and co-sponsored by The Carter Center and UNICEF, was attended by over 45 persons, including the ministers of health of Ethiopia, Mali and Sudan; directors from the ministries of health of Burkina Faso, Ghana, Niger, Nigeria, and Togo; representatives from seven countries in the pre-certification

phase; a member of the International Commission for the Certification of Dracunculiasis Eradication, and WHO assistant director-general <u>Dr. Margaret Chan.</u> Following brief presentations by <u>Dr. Donald Hopkins</u> of The Carter Center and <u>Dr. Dirk Engels</u> of WHO, the meeting praised the progress made so far, especially since the Geneva Declaration and Resolution 57/9 on Guinea worm eradication that were adopted during the 57th WHA two years ago, and discussed additional measures needed to stop transmission of the disease in all of the remaining endemic countries by the end of 2009. The minister of health of Sudan, the director-general from Ghana, and the minister of health of Mali assured the meeting that Guinea worm eradication is a priority for their respective governments. The director general from Togo, which expects to end transmission of the disease this year, expressed concern about the persistence of so many cases in neighboring Ghana. The ministers of health or their representatives emphasized the challenges to provide safe drinking water to as many endemic communities as possible and to maintain adequate resources for the programs, as well as to strengthen surveillance systems, including in formerly endemic areas. <u>The meeting unanimously agreed to include a formal report on the progress of the Guinea Worm Eradication Program at each year's World Health Assembly from now until dracunculiasis is eradicated.</u>

The EMR Office of WHO issued a Press Release describing the outcomes of the meeting, and a summary report has just been published in WHO'S <u>Weekly Epidemiological Record</u> (see Recent Publications). An exhibit prepared by WHO and The Carter Center on the Guinea Worm Eradication Program was displayed prominently during the Assembly, as well as various written handouts and free copies of the WHO-produced film, "The Final Sprint".

GHANA RECORDS MODEST REDUCTION IN CASES FOR MAY

Ghana has reported a provisional total of 322 cases of dracunculiasis in May 2006, which is a reduction of -30% compared to the 458 cases reported in May 2005. This brings Ghana's cumulative number of cases reported so far this year to 2,318, which is nearly the same as the 2,286 cases that were reported during the same period of 2005. With 87% (2,007) of this year's cases and an increase of 13% compared to January-May 2005, the Northern Region is by far the main focus of Ghana's persisting endemicity. Brong-Ahafo Region has reported 5% (125) of this year's cases, which is a 9% increase compared to 2005, while Volta Region has reported 3% (59) of this year's cases, for a reduction of -70% from last year's 196 cases during the same period. Upper West Region has reported 50 cases (2%) so far this year. The top five endemic districts in the country (Tolon-Kumbungu, Savelugu-Nanton, Tamale, Yendi, and East Gonja), all of which are in the Northern Region, collectively reported 1,789 cases, or 77% of all cases in the country during January-May 2006. Of the 528 known endemic villages, 273 reported one or more cases in January-April 2006.

Ghana's officially declared goal is to stop transmission of Guinea worm disease by March 6, 2007, the Golden Jubilee of Ghana's independence. This means that 100% of cases occurring in Ghana from that date forward must be contained. The percentage of cases contained in May is not yet available, but only 61% of cases that occurred in January-April 2006 were contained, indicating the need to sharply improve that important indicator of program performance soon. As of May 2006, 80% of endemic villages had received health education about preventing GW disease, 75% had cloth filters in all households, 14% had water sources being treated with ABATE@ larvicide, and 38% had at least one source of safe drinking water. In a move intended to help improve the latter, the minister of works and housing announced in May that the government would no longer require rural communities to pay five percent of the cost of their water projects as up-front counterpart funding. Because of the expected impact of 206 new wells installed in 123 endemic villages and water projects completed in two of the highest endemic towns by the Government of Ghana and several Non-Governmental Organizations during May-December 2005, Ghana's Guinea Worm Eradication Program predicted in March 2006 that cases should begin to decline in May 2006. Notwithstanding that accelerated effort however, as of May only 10 of this year's top 20 endemic communities (50%) had at least one safe source of drinking water, and only 4 of them (20%) had adequate sources of safe drinking water (one borehole or more per 300 inhabitants) (Table 1).

CARTER CENTER HEALTH PROGRAM WINS 2006 GATES AWARD



The Gates Award for Global Health

The Bill & Melinda Gates Foundation announced on May 15 that The Carter Center would be awarded the 2006 Gates Award for Global Health, "in recognition of its pioneering work to fight neglected diseases such as Guinea worm, river blindness, trachoma, schistosomiasis and lymphatic filariasis". The \$1 million Gates Award is the world's largest prize for international health. It was established by <u>Bill and Melinda Gates</u> in 2000 to recognize exemplary work in international health. The Carter Center was selected from more than 60 nominees by a jury of international health leaders. <u>Bill Gates Sr.</u>, the co-chair of the Gates Foundation, presented the award to <u>Mr. John Moores</u>, the

chairman of the Board of Trustees of The Carter Center, at the Global Health Council's 33rd Annual International Conference on Global Health in Washington, DC on June 1, 2006. Former US President Jimmy Carter, who founded the Center with his wife Rosalynn Carter in 1982, who could not attend the ceremony on June 1, spoke at the conference on June 2. In announcing the award, Bill Gates Sr. said "For more than two decades, The Carter Center has worked to control and eradicate diseases that afflict the poorest of the poor. I have seen first-hand the extraordinary impact of The Carter Center's health programs. This award is a tribute not only to the leadership of Jimmy and Rosalynn Carter, but also to the Center's very competent and dedicated staff."

STATUS OF GATES/UNICEF WATER SUPPLY PROJECTS

The 14 new borehole wells in **Togo** were successfully drilled by January 2006 but were not fitted with hand pumps. Three of the new wells were fitted with temporary hand pumps in April. Hand pumps for all 14 wells arrived in country in early June, but had not yet been installed as of June 8th. In 2005, nearly two-thirds of Togo's 73 cases occurred in January-June (see Figure 2).

As reported in the previous issue, the projects in Mali (12 wells) and Niger (7 wells) have been completed.

			Cases		Safe Water		
Community	District	Population	Jan-Apr 2006	Function /total b/h	1+	Adequate*	
Wantugu	Tolon/Kumbungu	2,997	163	2/3	Y	N	
Savelugu	Savelugu/Nanton	24,172	144	117 water points but no water in system	Y	N	
Sang	Yendi	6,302	74	6/6	Y	N	
Diare	Savelugu/Nanton	14,226	67	5/5	Y	N	
Tugu	Tamale	14,061	51	0/2	N	N	
Tampion	Savelugu/Nanton	418	47	2/2	Y	Y	
Kpabia	Yendi	4,220	45	7/8	Y	N	
Kanbagu	Tolon/Kumbungu	471	38	2/3	Y	Y	
Zoggu	Savelugu/Nanton	1,146	36	0/0	N	N	
Nyujaguyili	Tolon/Kumbungu	732	35	0/1	N	N	
Kufu	Sene	103	31	0/2	N	N	
Zoosali	Savelugu/Nanton	1,064	30	4/4	Y	Y	
Densi	Sekyere East	172	28	0/1	N	N	
Shishegu	Tamale	2,670	27	2/3	Y	N	
Chanshegu	Tamale	544	25	2/2	Y	Y	
Gunayili	Tamale	140	24	0/0	N	N	
Jegun-Kakao	Savelugu/Nanton	156	23	0/0	N	N	
Kablipe	Central Gonja	471	20	0/0	N	N	
K. Kpalaguni	East Gonja	220	20	0/0	N	N	
Takpeli	East Gonja	149	19	0/0	N	Ν	

Comments

Borehole to be mechanized. Target of Nov. 2006. 50 lpm will give town 50% safe water Mechanized scheme targeted for 9/06, Kantshegu addition targeted for 11/06 will give town 40% safe . Phase 2 of system targeted for 12/06 will give town 100% safe water Completion of AFD system targeted for 9/'06 will give town 100% safe water Needs Tamale water system upgrade targeted for completion in mid 2008 (see 'a' below) World Vision drilled high yield hole. Would need to be mechanized. No current funding to do so. 5 new handpumps installed in May, 2006 by COC using Hilton/UNICEF funding. Nothing further envisioned

Sokopump dam system installed in 03/06. Should attempt to drill but none scheduled at this time. COC to drill at end of 2006.

Nothing further envisioned

Nothing further envisioned (see 'b' below)

Needs Tamale water system upgrade targeted for completion in mid 2008 (see 'a' below) Needs Tamale water system upgrade targeted for completion in mid 2008 (see 'a' below) Needs Tamale water system upgrade targeted for completion in mid 2008 (see 'a' below) Should attempt to get World Vision to drill if possible. Nothing scheduled at this time.

COC to drill but not until 2007

COC to drill but not until 2007

* 1 or more b/h per 300 population

Number of top 20 coummunities with 1+ safe water = 10/20 = 50%Number of top 20 communities with adequate safe water =4/20 = 20%

(a) A proposal for a tanker filling station has been written and forwarded to Wateraid (via NewEnergy) and UNICEF (not officially but just for feedback). This would place storage tanks in the endemic communities to be filled by tankers who get the water from a location in Tamale. The \$60,000 proposal would provide some relief for endemic Tamale communities if accepted.

(b) Unconfirmed data

Table 2

Number of Cases Contained and Number Reported by Month during 2006* (Countries arranged in descending order of cases in 2005)

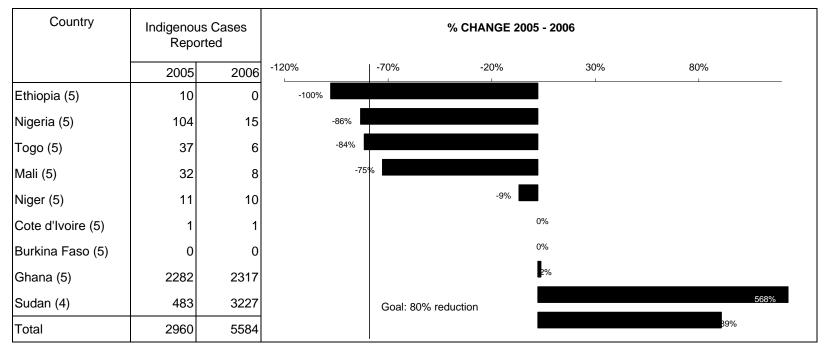
COUNTRIES REPORTING CASES			NUMBER OF CASES CONTAINED / NUMBER OF CASES REPORTED										%	
	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL*	CONT.
SUDAN	0 1 2	0 / 1	183 / 366	2276 / 2858	/	/	/	/	/	/	/	/	2459 / 3227	76
GHANA	397 / 608	378 / 587	267 / 411	237 / 390	160 / 322	/	/	/	/	/	1	/	1439 / 2318	62
MALI	3 / 3	1 / 1	0 / 0	1 / 1	3 / 3	/	/	/	/	/	/	/	8 / 8	100
NIGER	² / ₂	0 / 0	0 / 0	1 / 2	6 / 6	/	/	/	/	/	/	/	9 / 10	90
NIGERIA	0 / ₀	10 14	0 / 0	0 / ₀	0 / 1	/	/	/	/	/	/	/	10 / 15	67
TOGO	1 / 1	² / ₃	0 / 0	0 / 1	1 / 1	/	/	/	/	/	/	/	4 / 6	67
BURKINA FASO	0 / ₀	0 / ₀	0 / 0	0 / ₀	° / ₀	/	/	/	/	/	/	/	0 / 0	0
COTE D'IVOIRE	0 / 0	° / ₀	0 / 0	1 / 1	0 / ₀	/	/	/	/	/	/	/	1 / 1	100
ETHIOPIA	1 / 1	0 / 0	0 / 0	0 / 0	1 / 1	/	/	/	/	/	/	/	² / ₂	100
TOTAL*	404 / 617	391 / 606	450 / 777	2516	171 / 334	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	³⁹³² / ₅₅₈₇	70
% CONTAINED	65	65	58	77	51								70	
% CONT. OUTSIDE SUDAN	66	65	65	61	51								62	

* provisional

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

Figure 1

Number of Indigenous Cases Reported During the Specified Period in 2005 and 2006*, and Percent Change in Cases Reported



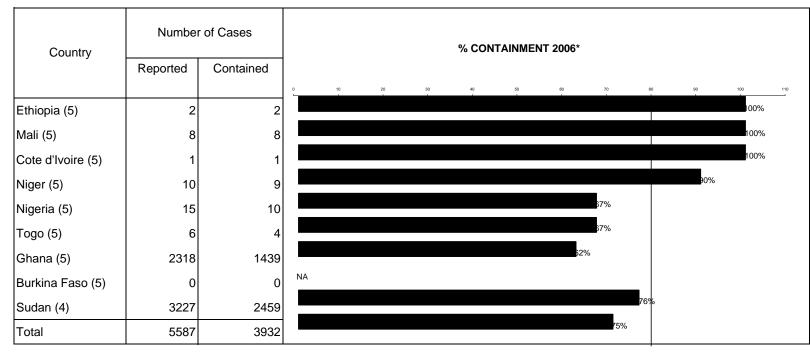
Overall % change outside of Sudan = -5%

(5) Indicates months for which reports were received, i.e., Jan. - May 2006

* Provisional

Figure 2

Number of Cases of Dracunculiasis Reported by Country During the Specified Period in 2006*, and of Cases that were Contained

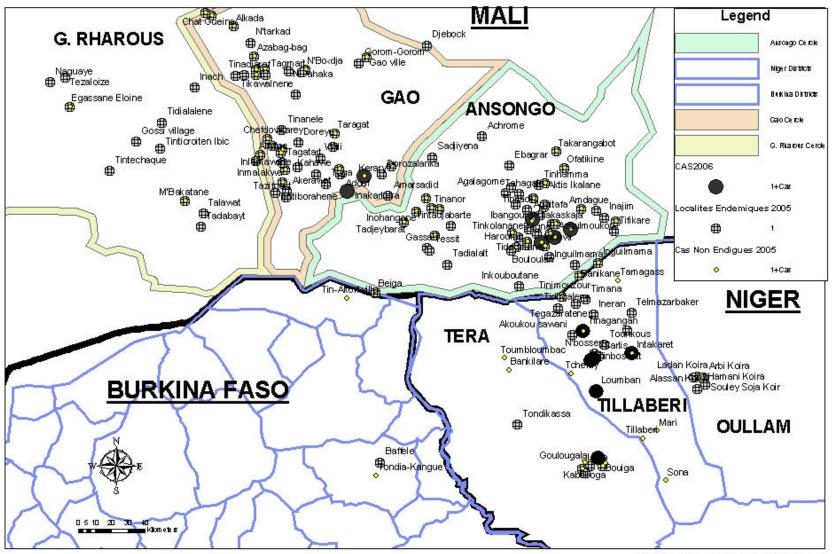


(5) Indicates months for which reports were received, i.e., Jan-May 2006

* Provisional

Vertical line indicates 80% goal

GUINEA WORM ENDEMIC LOCALITIES (2005), UNCONTAINED CASES (2005) & NEW CASES (2006) IN BORDERING COUNTRIES (MALI, NIGER, BURKINA FASO)



CUMULATIVE CASES OF DRACUNCULIASIS BY MONTH 2005 - 2006* 80 73 **──** 2005 **──** 2006 70 64 60 58 60 -57 53 50 47 39 40 -30 -20 20 17 15 10 6 0 JAN FEB MAR APR MAY JUN JUL AUG SEPT OCT NOV DEC MONTH * Provisional

TOGO GUINEA WORM ERADICATION PROGRAM

IN BRIEF:



Mali's <u>Minister of Health Mme. Zeinab M.Y. Maiga</u> personally conducted a review of Mali's Guinea Worm Eradication Program and visited several health centers during a visit to Gao Region, including Ansongo District, in May. Representatives from the three remaining endemic regions (Gao, Mopti, Timbuktu), national coordinator <u>Dr. Gabriel Guindo</u>, and Carter Center resident technical advisor <u>Mr. Jim Ting</u> all participated in the review, which occurred only a few days before the minister left to attend the World Health Assembly. This was the honorable minister's third visit to an endemic region since last October and completes her review of the

program in each of the endemic regions remaining in Mali (she visited Mopti Region in October 2005 and Timbuktu Region in January this year). So far this year, Mali has recorded a reduction of -75% in indigenous cases (from 32 cases in January-May 2005 to 8 cases in 2006). Mali's peak transmission season is July-November.



Ethiopia's <u>State minister of Health Dr. Kebede Worku</u> and a team of senior officials from Addis Ababa visited Gambella Region on May 19 to review preparations for stopping transmission of Guinea worm disease in that final endemic area of the country. The head of the Gambella Region Health Bureau, <u>Mr. Kuor Poch</u>, hosted the advocacy visit, which included a visit to a health center in Itang District, and a large stakeholders meeting that focused on all aspects of

intensification of Guinea worm interventions. The state minister's party included representatives of WHO, UNICEF and Carter Center Country Representative <u>Mr. Teshome Gebre</u>.



Cote d'Ivoire. The Rotary Club in Abidjan-Golf, two Rotary Clubs in Brunswick, Georgia USA, and Rotary International have joined forces to help provide 57 wells in two areas of Cote d'Ivoire that are at risk for Guinea worm disease. <u>Mr. Bob Scully</u> of MAP International facilitated this collaborative effort.

Liberia. <u>Dr. Ahned Tayeh</u>, WHO/Geneva, is visiting the Republic of Liberia (during June 19-26) to prepare for verification of the country by an independent Certification Team (ICT) that is scheduled to visit Liberia by December 2006. Dr. Tayeh is visiting Lofa County, which borders with Guinea and Sierra Leone, to assess the areas at risk of local transmission and the status of drinking water sources. If Liberia is found free of dracunculiasis by the ICT during its visit later this year, the International Commission for Certification of Dracunculiasis will consider whether of not to certify Liberia as free of dracunculiasis during its next meeting in March 2007.

Nigeria. An imported case of dracunculiasis was reported in a village of Bukkuyum Local Government Area of Zamfara State in NE Nigeria in May 2006. Transmission of dracunculiasis from the patient, a male farmer, was not contained. The village volunteer reported having seen a worm emerge, but his supervisor did not arrive in time (within 7 days of worm emergence) to confirm the case and the case containment process. Zamfara State has not reported indigenous cases of dracunculiasis since before January 2004. Preliminary investigations indicate that the patient visited several communities in Oyo State in SW Nigeria during 2005, but none of the villages visited have had documented indigenous cases of dracunculiasis since February 2004. The probable origin of this case of dracunculiasis remains to be ascertained.

Niger's <u>Minister of Health Mr. Ali Ibrahim</u> launched a Worm Week in the village of Bouyiga, in Tera District on June 14. The minister was accompanied by the governor of Tillabery Region, other local authorities, regional and national ministry of health staff, including <u>Mr. Sadi Moussa</u>, representatives of WHO, UNICEF and Carter Center resident technical advisor <u>Mr. Salissou Kane</u>. The worm week of intensive health education and community mobilization will be conducted in Tera, Tillaberi and Ouallam Districts from June 14 to June 20.

TRANSITIONS

It is with deep sadness and regret that we acknowledge the sudden and unexpected passing of <u>Dr. LEE Jong-wook</u>, the popular and highly respected director-general of the World Health Organization. Dr. Lee, who was 61 years old, died suddenly on May 22nd, the opening day of the 59th World Health Assembly, after having been stricken on May 20. Among his many effective efforts and accomplishments, Dr. Lee was a strong friend of the Guinea Worm Eradication Program, having attended the final day of the Program Review for the Guinea worm programs of Ghana, Nigeria and Sudan that was held at The Carter Center in September 2003, and he joined former US <u>President Jimmy Carter</u> in a visit to endemic areas of Ghana in February 2004. In his letter of condolence to Dr. Lee's family, President Carter, who addressed the 57th World Health Assembly in May 2004 at the invitation of Dr. Lee, stated that [Dr. Lee] ". . . inspired us through his grace, humility, and vision for a better world". Dr. Lee, who was from Korea, had worked for WHO for 23 years.

We also regret to report the death of <u>Mr. Emmanuel Osei-Kofi</u>, a zonal coordinator in Ghana's Guinea Worm Eradication Program, who was killed during a bicycle ride to promote Guinea worm awareness in the Brong-Ahafo Region on June 9, when a passing vehicle blew a tire and swerved into the line of bikers. Mr. Osei-Kofi was the only person injured. He had joined the bike ride only thirty minutes before. We extend our most profound condolences to his family.

We regret to inform our readers of the passing of <u>Dr. Brian Duke</u>, who died suddenly at home in England on June 3rd. Dr. Duke was for many years the resident expert on filarial infections at the World Health Organization's headquarters in Geneva, Switzerland. While he was much better known for his pioneering work and research on onchocerciasis, lymphatic filariasis, and loiasis, in 1984 he published a brief report in WHO's World Health magazine, entitled "Filtering out the Guinea worm", that documented the efficacy of cloth filters in removing infected copepods from drinking water and thus preventing dracunculiasis infections in humans. That report was one of the key supporting documents during the earliest phase of the global Guinea worm Eradication Program. We extend our condolences to his family.

RECENT PUBLICATIONS

Hopkins D.R, 2006. Eradicating Guinea worm disease (letter). New African (June), p.6.

World Health Organization, 2006. Dracunculiasis eradication: ministerial meeting on 25 May 2006, Geneva. <u>Wkly</u> Epidemiol Rec 81:239.

Ruiz-Tiben, E., Hopkins D.R, 2006. Dracunculiasis (Guinea Worm Disease) Eradication. <u>Advances in Parasitology</u>, 61:275-309.

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. Sharon Roy, 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 is http://www.cdc.gov/ncidod/dpd/parasites/guineaworm/default.htm.



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

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ERADICATE GUINEA WORM DISEASE BY 2007