

**DEPARTMENT OF HEALTH & HUMAN SERVICES** 

Date: January 27, 2006



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

Subject: GUINEA WORM WRAP-UP #159

To: Addressees

## **BENIN & MAURITANIA BREAK TRANSMISSION!**



Benin and Mauritania both reported zero indigenous cases of dracunculiasis (Guinea worm disease) for a full calendar year for the first time in 2005. Benin's last reported indigenous case was reported in March 2004, while Mauritania's final indigenous case was reported in June 2004. These two countries reported peaks of 37,414 and 8,301 cases, respectively, in 1990. Congratulations to Benin's National Coordinator, <u>Dr. Aristide Paraiso</u>, and to Mauritania's National Coordinator, <u>Dr. M'hammed Ould Sidi Lebatt</u> and their respective GWEP staff for this achievement! We are delighted to welcome them to the non-endemic countries in the pre-certification stage, which is being supported and led by the World Health Organization (WHO)!!! Eleven of the 20 formerly endemic countries have now interrupted transmission of dracunculiasis.

Of the nine remaining endemic countries, Nigeria and Togo made the next most significant advances in 2005, reducing their numbers of indigenous cases by -76% (from 495 to 120 cases) and -70% (from 232 to 70 cases), respectively. Nigeria reported fewer cases than Mali and Niger for the first time, while Togo reported less than 100 cases in a calendar year for the first time. (Figures 1, 2, and 3) During the last five months of 2005, Nigeria reported only 5 indigenous cases, compared to 112 indigenous cases in the same five months of 2004, for a reduction of -96% during what used to be Nigeria's peak transmission season. All five of the cases in August -December 2005 were reportedly contained, compared to 91% of the 112 cases in the same period of 2004. Only 40 villages in Nigeria reported one or more cases of dracunculiasis during 2005, a reduction of -53% from the 85 villages that reported one or more cases during 2004. Nigeria's National Committee on Certification for Guinea Worm Disease Eradication met for the first time in Minna, Niger State on November 29-30, 2005 (see Guinea Worm Wrap-Up #156 for the list of members). During the last 5 months of 2005, Togo reported only 17 indigenous case, compared to 78 indigenous cases during the same five months of 2004, for a reduction of -78% during what used to be Togo's peak transmission season. Fourteen (82%) of the 17 cases reported in Togo during August – December 2005 were contained. Nigeria reported a peak of 653,492 cases in 1988 and Togo a peak of 10,349 cases in 1993.

Of the next least endemic countries, Ethiopia reported 5 uncontained cases (out of 37 total) in 2005, Cote d'Ivoire 6 uncontained (of 10), and Burkina Faso 9 uncontained (of 30).



#### NIGERIA GUINEA WORM ERADICATION PROGRAM

MONTHLY DISTRIBUTION OF CASES OF DRACUNCULIASIS REPORTED DURING 2004 - 2005\*

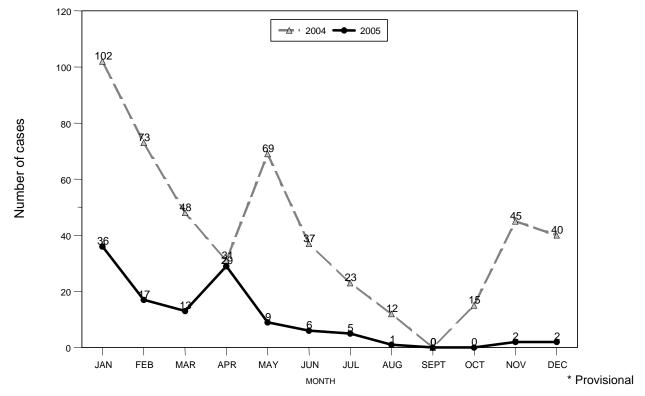
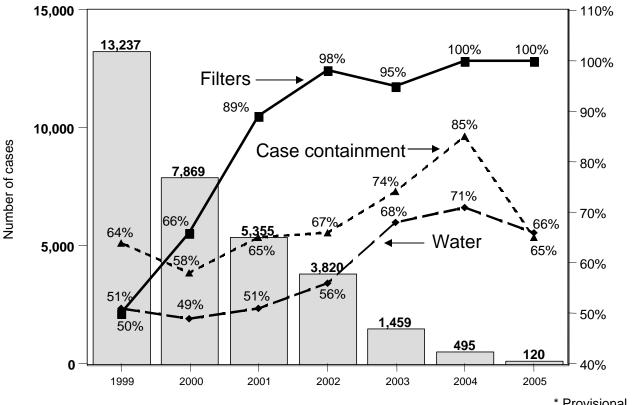


Figure 2 CASES REPORTED, AVERAGE OF ENDEMIC VILLAGES WITH FILTERS AND SAFE WATER, AND CASES CONTAINED: NIGERIA 1999 -2005\*



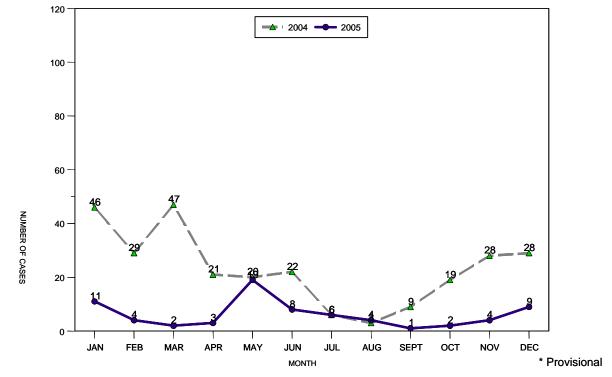
% Endemic Villages Covered

<sup>\*</sup> Provisional

Figure 3

#### TOGO GUINEA WORM ERADICATION PROGRAM

MONTHLY DISTRIBUTION OF CASES OF DRACUNCULIASIS REPORTED DURING 2004 - 2005\*



#### ALLEGED CASE IMPORTED FROM NIGERIA TO CAMEROON

Dr. Dama Mana, the national program coordinator of Cameroon, has reported an alleged case of dracunculiasis imported into Cameroon from Bama Local Government Area in Borno State, Nigeria. Analysis of the DNA on the specimen received at CDC from WHO headquarters in November 2005 confirms that the worm that was examined is *D. medinensis*. The patient, a 12 year-old Cameroonian boy, reportedly entered Nigeria in February 2004 after studying at a Koranic school in Nigeria since 2002, and the worm was obtained after incision and drainage of an abscess on March 13, 2004. Although it is true, as Nigeria's GWEP staff argued, that this person did not meet the international definition of a case of GWD, there is no question now that this person was infected with Dracunculus medinensis. Where exactly this boy was infected remains a question. Nigeria has been encouraged to follow the lead back to the Koranic school where this boy attended, and this belated investigation is continuing. EDITORIAL NOTE: The long delay in the investigation and confirmation of this important case is disappointing, since Cameroon's last indigenous case is believed to have occurred in October 1997, and no known indigenous case has been detected in Nigeria's Borno State since October 2000. The first report of this patient to Cameroonian authorities should have triggered a much more thorough and prompt response both in Cameroon and Nigeria nearly two years ago!

# Table 1

# Number of Cases Contained and Number Reported by Month during 2005\* (Countries arranged in descending order of cases in 2004)

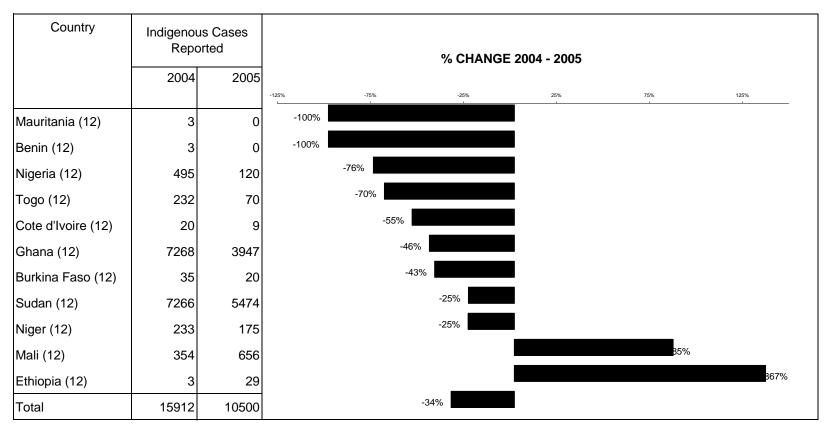
COUNTRIES REPORTING CASES	NUMBER OF CASES CONTAINED / NUMBER OF CASES REPORTED													%
	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL*	CONT.
GHANA	375 <sub>/</sub> 547	<sup>343</sup> / <sub>483</sub>	<sup>282</sup> / <sub>395</sub>	<sup>248</sup> / <sub>395</sub>	<sup>330</sup> / <sub>460</sub>	244 / 386	97 <sub>/</sub> 161	21 / 61	26 <sub>/</sub> 54	75 / <sub>218</sub>	129 / 347	174 <sub>/ 444</sub>	2344 / 3951	59
SUDAN	0 <sub>/ 68</sub>	1 / 48	1 / 160	5 <sub>/ 96</sub>	9 / 1618	1 / 1446	<sup>11</sup> / <sub>543</sub>	<sup>2</sup> / <sub>482</sub>	6 <sub>/ 321</sub>	6 <sub>/ 398</sub>	4 / <sub>292</sub>	<sup>0</sup> / <sub>2</sub>	46 / 5474	1
NIGERIA	25 <sub>/</sub> 36	13 / <sub>17</sub>	9 / <sub>13</sub>	<sup>11</sup> / <sub>29</sub>	7 / 9	4 / <sub>6</sub>	4 <sub>/ 5</sub>	1 / 1	° / <sub>0</sub>	0 / <sub>0</sub>	<sup>2</sup> / <sub>2</sub>	<sup>2</sup> / <sub>2</sub>	<sup>78</sup> / <sub>120</sub>	65
MALI	<sup>3</sup> / <sub>4</sub>	1 / 1	1 / 1	1 / 1	<sup>22</sup> / <sub>25</sub>	<sup>25</sup> / <sub>25</sub>	42 <sub>/ 84</sub>	99 / 132	163 <sub>/ 203</sub>	96 / 116	47 / 51	10 / 13	<sup>510</sup> / <sub>656</sub>	78
NIGER	<sup>2</sup> / <sub>2</sub>	4 / 4	1 / 1	1 / 4	1 / 3	<sup>3</sup> / <sub>3</sub>	5 / <sub>7</sub>	<sup>22</sup> / <sub>23</sub>	19 / 19	41 / 43	51 / 59	14 / 15	164 / 183	90
TOGO	11 / 11	1 / 4	<sup>2</sup> / <sub>2</sub>	<sup>3</sup> / <sub>3</sub>	16 / 19	7 / 8	5 <sub>/ 6</sub>	1 / 4	0 / 1	1 / 2	4 / 4	<sup>8</sup> / <sub>9</sub>	<sup>59</sup> / <sub>73</sub>	81
BURKINA FASO	0 / <sub>0</sub>	0 / <sub>0</sub>	0 / <sub>0</sub>	1 / 1	<sup>0</sup> / <sub>0</sub>	<sup>3</sup> / <sub>3</sub>	<sup>0</sup> / <sub>5</sub>	13 / 15	0 / <sub>0</sub>	1 / 1	<sup>3</sup> / <sub>4</sub>	0 / 1	<sup>21</sup> / <sub>30</sub>	70
COTE D'IVOIRE	0 / <sub>0</sub>	° / <sub>0</sub>	1 / 1	0 / <sub>0</sub>	<sup>0</sup> / <sub>0</sub>	<sup>0</sup> / <sub>3</sub>	1 / 4	1 / 1	0 / <sub>0</sub>	1 / <sub>1</sub>	<sup>0</sup> / <sub>0</sub>	0 / <sub>0</sub>	4 / 10	40
BENIN	° / <sub>0</sub>	° / <sub>0</sub>	1 / 1	° / <sub>0</sub>	° / o	<sup>0</sup> / <sub>0</sub>	° / <sub>0</sub>	° / <sub>0</sub>	°/ <sub>0</sub>	° / <sub>0</sub>	° / <sub>0</sub>	° / <sub>0</sub>	1 / <sub>1</sub>	100
ETHIOPIA	<sup>2</sup> / <sub>2</sub>	° / <sub>0</sub>	0 / <sub>0</sub>	<sup>3</sup> / <sub>3</sub>	7 / 7	16 / 20	<sup>2</sup> / <sub>2</sub>	<sup>2</sup> / <sub>3</sub>	° / <sub>0</sub>	° / <sub>0</sub>	° / <sub>0</sub>	° / <sub>0</sub>	<sup>32</sup> / <sub>37</sub>	86
MAURITANIA	0 / <sub>0</sub>	0 / <sub>0</sub>	0 / <sub>0</sub>	0 / <sub>0</sub>	<sup>0</sup> / <sub>0</sub>	0 / <sub>0</sub>	0 / 0	° / <sub>0</sub>	° / <sub>0</sub>	° / <sub>0</sub>	° / <sub>0</sub>	0 / <sub>0</sub>	0 / <sub>0</sub>	0
UGANDA	° / <sub>0</sub>	° / <sub>0</sub>	0 / <sub>0</sub>	° / <sub>0</sub>	° / o	4 <sub>/ 4</sub>	1 / <sub>1</sub>	<sup>2</sup> / <sub>2</sub>	<sup>2</sup> / <sub>2</sub>	° / <sub>0</sub>	<sup>0</sup> / <sub>0</sub>	° / <sub>0</sub>	<sup>9</sup> / <sub>9</sub>	100
TOTAL*	418 <sub>/</sub> 670	<sup>363</sup> / <sub>557</sub>	<sup>298</sup> / 574	273 / 532	<sup>392</sup> / <sub>2141</sub>	307 <sub>/</sub> 1904	168 <sub>/ 818</sub>	164 / 724	216 / 600	<sup>221</sup> / <sub>779</sub>	<sup>240</sup> / <sub>759</sub>	<sup>208</sup> / 486	<sup>3268</sup> / <sub>10544</sub>	31
% CONTAINED	62	65	52	51	18	16	21	23	36	28	32	43	31	

#### \* provisional

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

### Figure 4

Number of Indigenous Cases Reported During the Specified Period in 2004 and 2005\*, and Percent Change in Cases Reported



(12)Indicates months for which reports were received, i.e., Jan-Dec 2005 Provisional Overall % change outside Sudan =-42%

#### GHANA REPORTS 46% FEWER CASES IN 2005, MORE PIPE FILTERS

Ghana has reported a provisional total of 3,951 cases of dracunculiasis in 2005, which is a reduction of -46% from the 7,275 cases that Ghana reported in 2004. All but 81 of the cases in 2005 were in four regions: Northern (2,973), Upper West (322), Volta (286) and Brong Ahafo (289). Cases in the first half of 2005 were reduced by -53% compared to the same period of 2004 (2,666 vs. 5,700 cases), while cases were reduced by only -20% in July-December 2005 compared to the same period of 2004 (1,285 cases vs. 1,575 cases).

The Japan International Cooperation Agency has donated approximately \$29,210 for purchasing pipe filters, while the British High Commission in Accra has donated approximately \$10,189 for the same purpose; the latter at the urging of Miss Ghana 2005. These two donations will allow Ghana's Guinea Worm Eradication Program to purchase a total of about 207,000 additional pipe filters for distribution in endemic villages. The Government of Ghana and its partners have provided 124 new borehole wells to 89 endemic villages that collectively reported 30%, or 2,177 of the 7,275 cases that were reported in Ghana in 2004.

#### MALI'S PRESIDENT VISITS GAO, MINISTER OF HEALTH TO TIMBUKTU

Mali's <u>President Amadou Toumani Touré</u> met at Gao for more than an hour with administrative and public health officials in Gao Region, including the governor of Gao, the *prefet* of Ansongo District, the regional health and water supply directors of Gao Region, the *medecins chefs* of Ansongo, Gao and Bourem Districts, as well as other officials and health workers involved in the Guinea Worm Eradication Program in Gao Region, on December 20, 2005. The president said the purpose of his meeting was to understand what was required in order to finish eradicating dracunculiasis from the region. Having recently returned from a meeting with former U.S. <u>President Jimmy Carter</u> in Atlanta on December 9, President Touré said he was embarrassed at the status of the disease in Mali. He announced the transfer of program personnel from Bamako to Mopti before the next peak transmission season, in order for them to be nearer the remaining endemic foci, he instructed the health and water ministries to provide more assistance, and he stated his intention to revitalize the Intersectorial Committee and review the status of the program regularly. In 2005, Gao Region, primarily Ansongo and Gao Districts, recorded 518 (79%) of the 656 cases reported in Mali.

On January 15, 2006, Mali's <u>Minister of Health Mdme. Maiga Zenab Mint Yoube</u> visited the third highest endemic region remaining, Timbuktu, to discuss the status of the program with health and administrative officials there. She made a similar visit to Mopti, the second highest endemic region, last October (see *Guinea Worm Wrap-Up* #157). The national Program Review that was scheduled to be held in January 2006 has been postponed.

As of January 2006, <u>Dr. Mamadou Bathily</u> becomes The Carter Center's new senior technical advisor to the GWEP in Mopti Region. <u>Mr. Jim Ting</u>, former Carter Center senior technical advisor in Togo, is the new resident technical advisor of The Carter Center to Mali's GWEP, based in Bamako. Welcome Jim Ting!

#### **IN BRIEF:**



**Niger.** Carter Center resident technical advisor <u>Mr. M. Salissou Kane</u> and Health and Development International's president <u>Dr. Anders Seim</u> met with <u>President</u> <u>Tandja Mamadou</u> of Niger on January 13. President Tandja requested a list of the remaining endemic villages in Niger to coordinate it with a water supply project of his government. The regional health director of Tillaberi Region, which

reported 93% of Niger's cases in January-November 2005, has been replaced. The new regional health director is <u>Dr. Lado Abdoulaye</u>. He will work with the new Guinea worm coordinator and the new technical assistant for Guinea worm eradication in Tillaberi Region.



**Togo.** UNICEF and The Carter Center supported the re-training of 1,096 village volunteers for the GWEP in 2005. Of the 73 cases reported in Togo in 2005, 59 (81%) were reportedly contained, and 48 (66%) of the 73 cases were contained in a case containment center. As of January 28, 2006, Mr. Wilbert Quintanilla is the new Carter Center Technical Advisor to Togo's GWEP. Welcome Wilbert!

#### UPDATE FROM WORLD HEALTH ORGANIZATION



The Department of Control, Prevention and Eradication in WHO Geneva, where the Guinea Worm Eradication Program was affiliated has been reorganized. It is now called Department of Control of Neglected Tropical Diseases, with Dr. Lorenzo Savioli as Director, and is composed of two main units that reflect the operational approach in terms of tropical diseases. The

Unit of Preventive Chemotherapy and Transmission Control (PCT) will promote the concept of large-scale treatment with limited number of drugs to relieve the burden of a wide range of tropical diseases, mainly helminthias. The Guinea Worm Eradication Program is part of that unit. The rationale is to provide an opportunity to integrate Guinea worm village volunteers in formerly endemic villages into community based drug distribution activities when appropriate. Dr. Dirk Engels is the Coordinator of the PCT Unit. The Unit of Innovative and Intensified Disease Management (IDM), headed by Dr. Jean Jannin, will promote intensified early diagnosis and case management of diseases such as trypanosomiasis, leishmaniasis, and Buruli ulcer, as well as rapid field access to new control tools as they become available. These Units are supported by the Vector Ecology and Management team (team leader is Dr. Mike Nathan), and the Disease Control in Humanitarian Emergencies team (the team leader is Dr. Maire Connolly).

<u>Ms Katherine Conlon</u> is leaving WHO to work with the Health Protection Agency, the Communicable Diseases Branch of the Public Health Service in the United Kingdom. Katherine enjoyed her work on behalf of the global effort to eradicate dracunculiasis. She leaves WHO thanking all the wonderful people she met and worked with, and who are dedicated to the global effort to eradicate dracunculiasis. She leaves wishing all good luck during the toughest last hurdle of the final sprint! Best wishes to you Katherine, and thanks for your contributions!

WHO consultant <u>Dr Robert T. Guiguemdé</u>, visited Chad to provide technical assistance and assess the surveillance system for Chad's Guinea Worm Eradication Program. The visit took place from 16 to 27 January 2006. He visited two districts of Fianga in Mayo-Kébbi Region and Benoye in Logone Region.

WHO is planning to conduct an independent external evaluation to confirm the interruption of transmission of Guinea worm disease in Mauritania. The proposed evaluation will take place from 1 to 15 March 2006. CDC, UNICEF and WHO will participate in the evaluation.

# UPDATE ON STATUS OF UNICEF/GATES WATER SUPPLY FOR MALI, NIGER AND TOGO

**Mali.** Successful borehole wells have been drilled, fitted with hand pumps, and are in use in 9 of the 14 endemic villages targeted. Four of these wells have been in use since July 2005. These nine villages reported a total of 106 cases in 2005.

**Niger**. Successful borehole wells have been drilled in 7 of the 12 endemic villages targeted. Six of these have been fitted with hand pumps. These 7 villages reported a total of 31 cases of dracunculiasis in 2005.

**Togo.** Successful borehole wells have been drilled in 14 of the 14 endemic villages targeted, but none of these wells have been fitted with hand pumps. These 14 villages reported a total of 28 cases of dracunculiasis in 2005.

#### **RECENT PUBLICATIONS**

Elsheikh, Ayman M, 2005. An evaluation of the Ghana Red Cross Mothers Clubs in the eradication efforts of dracunculiasis. Masters thesis submitted to Rollins School of Public Health, Emory University.

#### MEETINGS

Ethiopia Dracunculiasis Eradication Program review meeting. Addis Ababa, February 27, 2006

Ghana GWEP national review meeting. Accra, Ghana, March 2-3, 2006

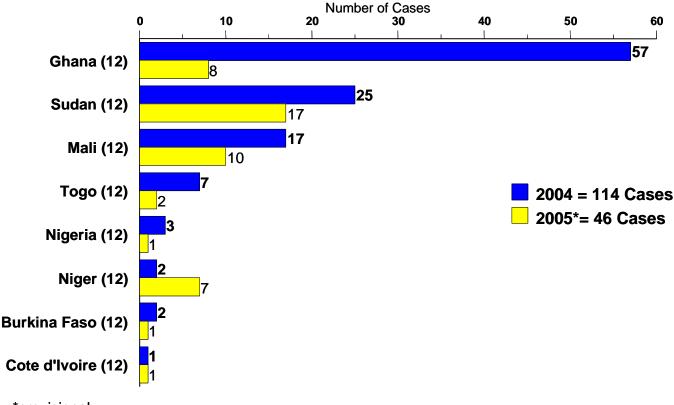
Meeting of pre-certification countries. Niamey, Niger. March 27-28, 2006.

Meeting of Program Managers of GWEPs. Niamey, Niger, March 29-31, 2006

59<sup>th</sup> World Health Assembly. Geneva, Switzerland, May 22-27, 2006.

Figure 5

# Distribution by Country of Origin of the Combined Cases of Dracunculiasis Exported to Other Countries During 2004 and 2005\*



\*provisional

(12)Indicates months for which reports were received, i.e., Jan-Dec 2005

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 <u>http://www.cdc.gov/ncidod/dpd/parasites/guineaworm/default.htm</u>.



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