DEPARTMENT OF HEALTH & HUMAN SERVICES

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

Memorandum

Date: April 20, 2011

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

Subject: GUINEA WORM WRAP-UP #204

To: Addressees

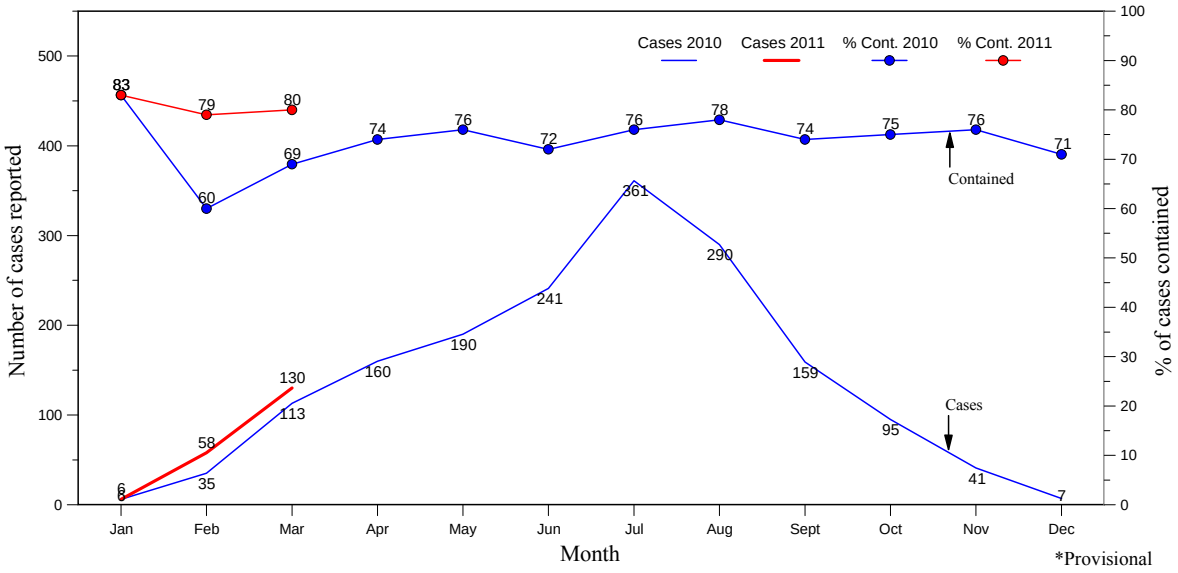
Number of uncontained cases in January-March 2011
Sudan: 39 Ethiopia: 1

SOUTHERN SUDAN: INCREASED CASES IN EASTERN KAPOETA COUNTY

Three payams in Eastern Kapoeta County of Eastern Equatoria State have reported 129 (66%) of 194 cases of Guinea worm disease (GWD) reported in Southern Sudan during January-March 2011. The payams are Kauto (71 cases, a 35% reduction from 109 cases reported during the same period of 2010), Mogos (49 cases, an 880% increase from 5 cases), and Narus (9 cases, an 80% increase from 5 cases). The reasons for these increases in Mogos and Narus were due to inadequate coverage of endemic areas by Southern Sudan Guinea Worm Eradication Program (SSGWEP) staff, poor supervisory performance by some Field Officers, including poor oversight by Field Officer supervisors, and late detection of cases during the first quarter of 2010 — deficiencies that were addressed by the SSGWEP during 2010, but the effects of which have become manifest during the first quarter of 2011. Overall, Southern Sudan has reported a 26% increase in cases (from 154 to 194), but the SSGWEP has contained 80% of all cases so far in 2011, compared to only 68% of cases contained during the first quarter of 2010 (Figure 1).

Figure 1

Number of Reported Cases of Dracunculiasis and Percentage of Cases Contained: Sudan 2010 - 2011*



Moreover, the program reports that 92 (71%) of the 130 cases reported in March (Table 1) were admitted to a case containment center. Dr. Ernesto Ruiz-Tiben, director of The Carter Center's Guinea Worm Eradication Program, made a supervisory visit to this area of Southern Sudan from March 23-31, 2011.

The SGWEP Task Force meeting took place on March 15, 2011 as scheduled. Key issues addressed included an update of the status of the SSGWEP, surveillance in GW-free areas, safe water provision, and communication strategies for increasing awareness of GWD across South Sudan. UNICEF assured the meeting that all pledged borehole wells have been contracted out to drilling companies and Non-Governmental Organizations. The next meeting of the SSGWEP Task Force will take place on April 27, 2011.

All four of the villages with 5 or more cases of Guinea worm disease (GWD) that were targeted to receive safe water in Dor Payam of Awerial County of Lakes State have now received boreholes contracted by UNICEF. These four villages reported a total of 33 cases in 2010. Awerial Country reported the fourth highest number of cases (262) among counties in Southern Sudan in 2010. From March 23-25, a multi-donor team that included representatives from UNICEF, The World Bank, European Union, United States Agency for International Development (USAID) and The Carter Center met with political officials and water and sanitation officers during a visit to Warrap State. The team reported that UNICEF plans to provide 75 borehole wells for endemic villages in Warrap State in 2011-12, of which 38 are to be provided in 2011. Drilling of the first 10 of these was expected to begin forthwith.

5th Annual SSGWEP Review Meeting Recommendations

1. The Task Force should meet every month, review the progress and plan for subsequent months. Start date of February 1, 2011.
2. The Ministry of Water Resources, with the assistance of the SSGWEP, should write letters to the State Governors of EEQ, Warrap, Lakes States, and the County Commissioners of Tonj North, Tonj East and Tonj South, Kapoeta East, Kapoeta North and Aweriel targeting the 84 highest priority EVs as of 2010 for safe water provision.
3. Technical Advisors and Program Officers should analyze and investigate with Field Officers the reasons for non-containment of cases of GWD during 2010 in order to improve containment rates during 2011.
4. The SSGWEP should consider using "Official Pond Protectors" in special locations such as where Abate can not be applied, large water sources, 5+ villages, villages with low filter uptake, and cattle camp populations.
5. The state and county surveillance officers and the SSGWEP at least on a monthly basis should exchange information on the rumours and confirmed guinea-worm disease cases, list of priority villages, villages with GW volunteers.

CHAD REPORTS A NEW CASE: PRESIDENT AND MINISTER OF HEALTH INTEND TO STOP THE OUTBREAK QUICKLY

Health authorities in Chad have reported a confirmed case of Guinea worm disease, Chad's first in 2011. The patient is an eleven year-old girl who is resident in the village of Toulomeye-Bardai, in Bere District of Tandjile Region. Her worm emerged on February 18. Bere District borders the west bank of the Logone River (most of the 10 confirmed cases reported in 2010, with worm emergences between April and October, were resident along the Chari River) (*see Guinea Worm Wrap-Up #203*). This patient was said to have not traveled out of Chad, but she reportedly visited markets in the villages of Kim and Koyou in Bongor District of Mayo Kebbi East Region, and Sere in Bere District with her parents in 2010. So far there is no known connection between this new case and any of last year's cases. This brings the number of villages considered at highest risk in Chad to 35 (31 in 2010, plus four new villages in 2011). Of the 210 villages visited by the epidemiologic team from CDC in January-February, 50% had a village-based health worker, 55% had residents who were drinking unsafe water, and 21% of informants were aware of the cash reward for reporting a case of dracunculiasis.

WHO Regional Director for Africa Dr. Luis Sambo had an audience with the President of Chad, His Excellency Mr. Idriss Deby Itno on March 1, 2011, and discussed the outbreak of Guinea worm disease in the country. Chad's Minister of Public Health, Mme Toupta Boguena, and the WHO Country Representative to Chad, Dr. Saidou Pathe Barry, also participated in the meeting in N'Djamena when Dr. Sambo attended a regional meeting in Chad of the heads of state of the Economic Community of Central African States. President Amadou Toumani Toure of Mali wrote President Deby in February to express concern about the recent outbreak in Chad. At a press conference on March 15, the minister of public health stated her government's commitment to terminate the outbreak quickly, and announced the signing of an accord with The Carter Center, under which The Carter Center will provide technical assistance to help the Government of Chad contain the outbreak. Ms. Kelly Callahan of Carter Center headquarters and Dr. Fernand Toe, Carter Center consultant, arrived in Chad on March 11 and attended the press conference, which was also attended by Dr. Alhousseini Maiga of WHO. The WHO office in Chad facilitated Ms. Callahan and Dr. Toe's visit to conclude the agreement and begin technical assistance by The Carter Center. According to a report in Nigeria's *The Guardian* newspaper on March 22, during the commemoration of the 2011 National Guinea Worm Eradication Day in Abuja, the Nigerian Federal Minister of Health, Prof. Onyebuchi Chukwu, represented by the permanent secretary in the ministry, stated that Nigeria would "Re-introduce and maintain a weekly sensitive surveillance structure in the north Eastern States to prevent GWD case from Chad and ensure prompt investigation and documentation of GWD rumors".

Figure 2

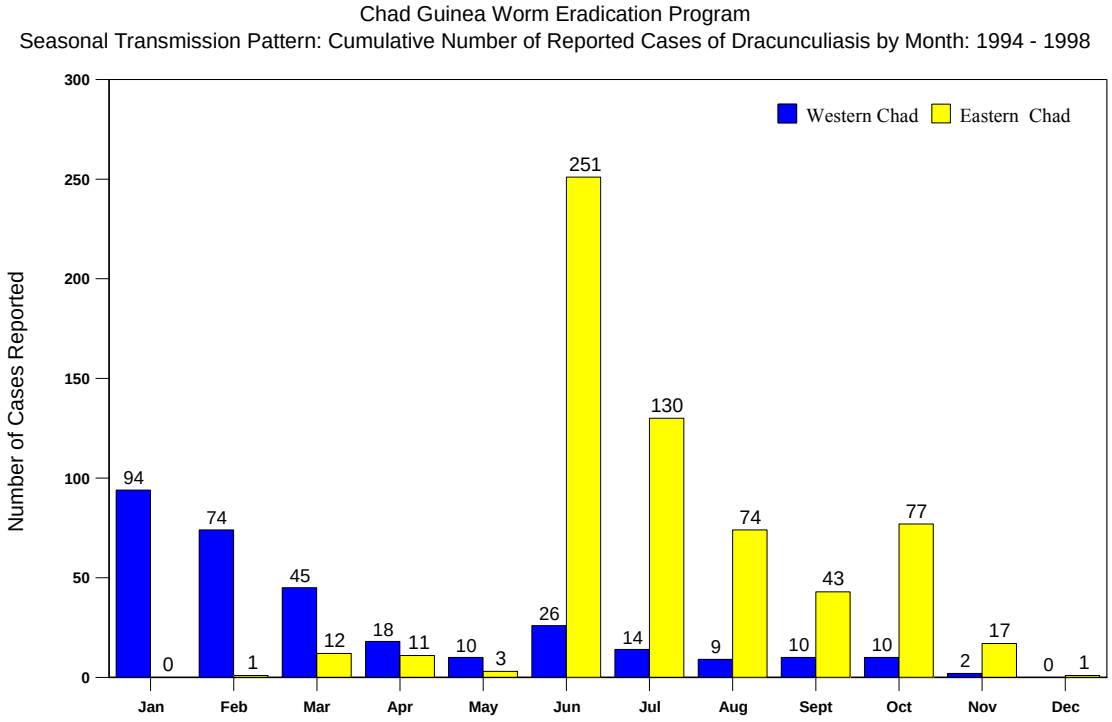


Figure 3

GUINEA WORM RACE: 2010

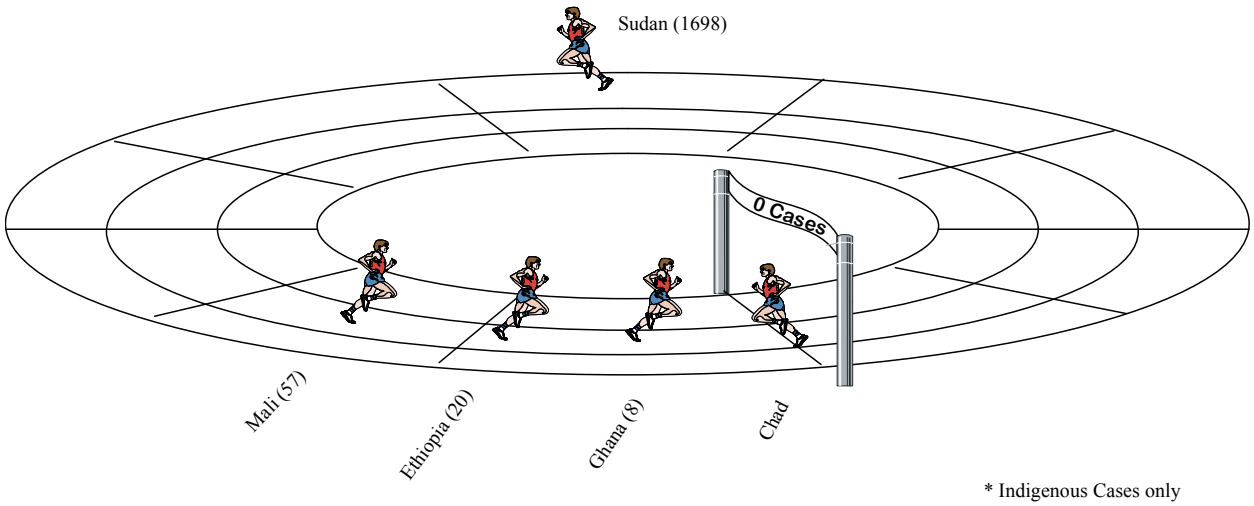


Table 1

Number of Cases Contained and Number Reported by Month during 2011* (Countries arranged in descending order of cases in 2010)

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	5 / 6	46 / 58	104 / 130	/	/	/	/	/	/	/	/	/	**155 / 194**	80
MALI	0 / 0	0 / 0	0 / 0	/	/	/	/	/	/	/	/	/	**0 / 0**	0
ETHIOPIA^	0 / 0	0 / 0	1 / 2	/	/	/	/	/	/	/	/	/	**1 / 2**	50
CHAD	0 / 0	1 / 1	0 / 0	/	/	/	/	/	/	/	/	/	**1 / 1**	100
GHANA	0 / 0	0 / 0	0 / 0	/	/	/	/	/	/	/	/	/	**0 / 0**	0
TOTAL*	5 / 6	47 / 59	105 / 132	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	**157 / 197**	80
% CONTAINED	83	80	80										80	
% CONT. OUTSIDE SUDAN	0	0	0										0	

* provisional

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

^ one case of GWD (not contained) was imported into Ethiopia from South Sudan during March.

Number of Cases Contained and Number Reported by Month during 2010 (Countries arranged in descending order of cases in 2009)

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	5 / 6	21 / 35	78 / 113	119 / 160	144 / 190	173 / 241	273 / 361	226 / 290	118 / 159	71 / 95	31 / 41	5 / 7	**1264 / 1698**	74
GHANA	2 / 2	3 / 3	1 / 1	1 / 1	1 / 1	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	**8 / 8**	100
MALI	0 / 0	0 / 0	0 / 0	0 / 0	1 / 1	0 / 0	4 / 6	6 / 6	13 / 19	18 / 19	3 / 5	0 / 1	**45 / 57**	79
ETHIOPIA^	0 / 0	1 / 1	2 / 2	6 / 6	1 / 2	1 / 2	1 / 1	2 / 2	1 / 1	1 / 1	2 / 2	1 / 1	**19 / 21**	90
CHAD	0 / 0	0 / 0	0 / 0	0 / 1	0 / 0	0 / 1	0 / 3	0 / 3	0 / 1	0 / 1	0 / 0	0 / 0	**0 / 10**	0
NIGER^	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	2 / 2	0 / 1	0 / 0	**2 / 3**	67
TOTAL*	7 / 8	25 / 39	81 / 116	126 / 168	147 / 194	174 / 244	278 / 371	234 / 301	132 / 180	92 / 118	36 / 49	6 / 9	**1338 / 1797**	74
% CONTAINED	88	64	70	75	76	71	75	78	73	78	73	67	74	
% CONT. OUTSIDE SUDAN	100	100	100	88	75	33	50	73	67	91	63	50	75	

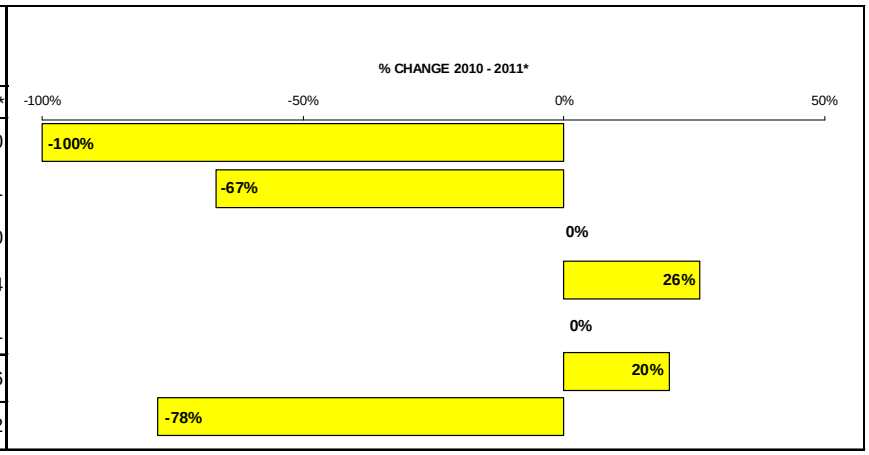
^ Ethiiopia reported and imported case from Southern Sudan in June, and Niger reported three imported cases from Mali (2 in October and 1 in November).The origin of cases in Chad is uncertain.

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 2010 and 2011*, and Percent Change in Cases Reported

Country	Indigenous Cases Reported	
	2010	2011*
Ghana (3)	6	0
Ethiopia (3)	3	1
Mali (3)	0	0
Sudan (3)	154	194
Chad (3)	0	1
Total	163	196
All countries, excluding Sudan	9	2



* Provisional. Excludes one case imported into Ethiopia from South Sudan in March.
(3) Indicates months for which reports were received, i.e., January - March.

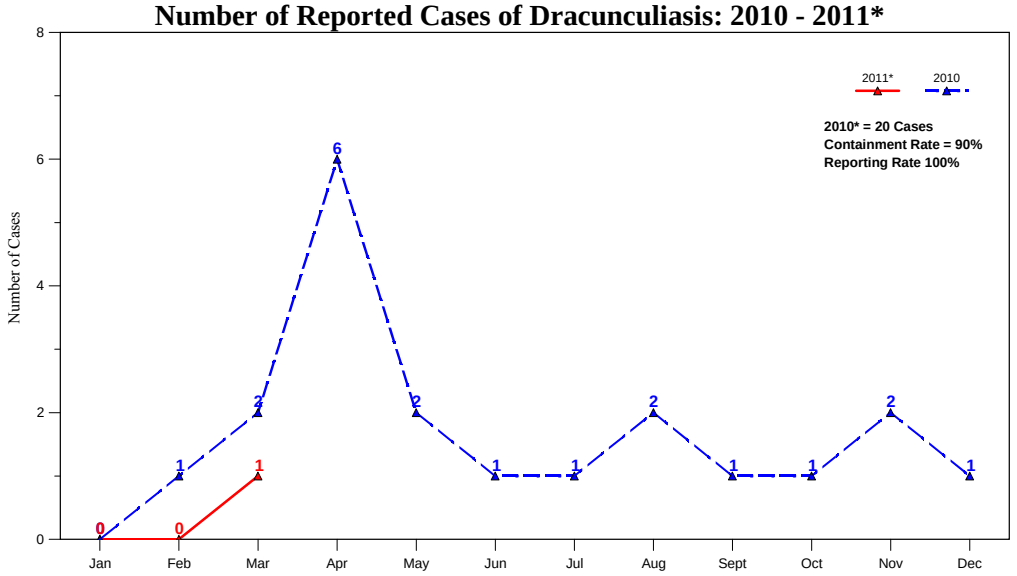
ETHIOPIA FINDS AN INDIGENOUS CASE AND AN IMPORTED CASE IN MARCH

The Ethiopian Dracunculiasis Eradication Program (EDEP) has confirmed a case of Guinea worm disease in a ten year-old boy who lives primarily in the village of Abawiri in Gog District of Gambella Region but also spends time in the village of Utuyu, as well as hunting and gathering with his older brother in the forest. The suspected case self-reported on March 27; he was admitted to the Case Containment Center when the worm began emerging on March 30. His older brother has not been located. Ethiopia's first known uncontained case in 2010 was in May.

On March 13, the EDEP also detected a 35 year-old male pastoralist of the Toposa ethnic group in Kibish Town of Surma District in Ethiopia's SNNP Region. The patient was from Lotimor payam in Southern Sudan's Eastern Equatoria State whose worm emerged on March 9 after he had come to Ethiopia with several others to trade.

Figure 5

Ethiopia Dracunculiasis Eradication Program
Number of Reported Cases of Dracunculiasis: 2010 - 2011*

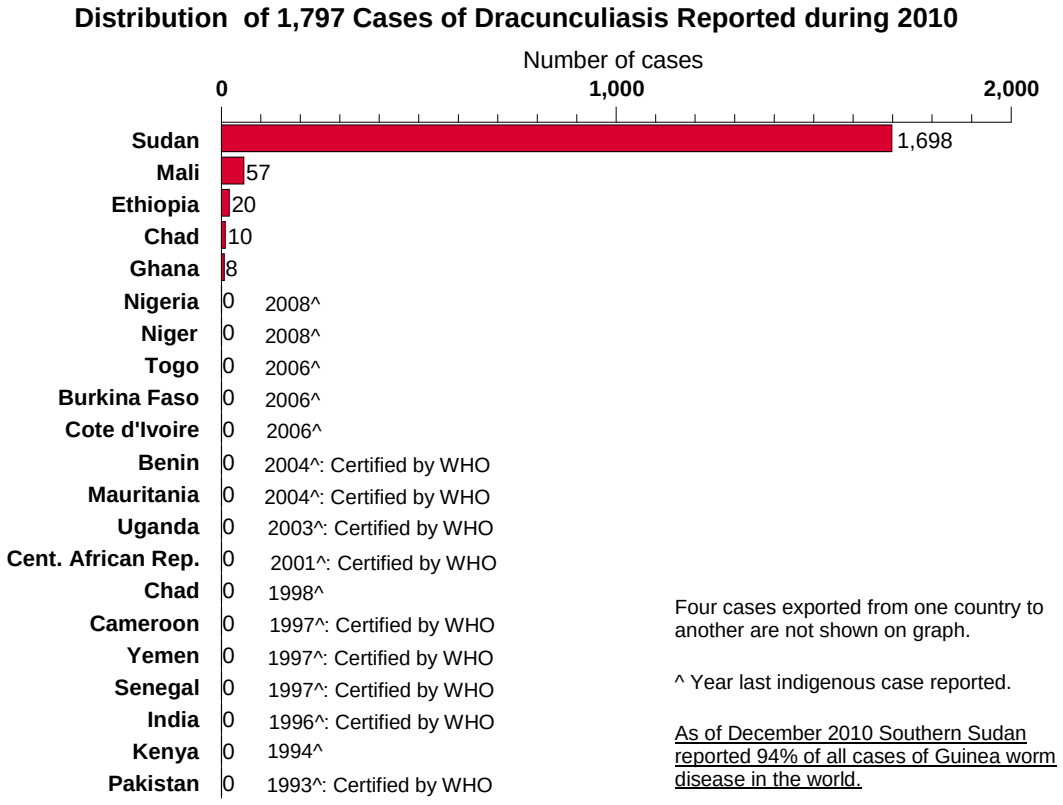


*provisional: excludes one case imported from South Sudan into Ethiopia in March.

RECENT PUBLICATIONS

World Health Organization, 2011. Monthly report on dracunculiasis cases, January-December 2010. Wkly Epidemiol Rec 86:91-92

Figure 6



Inclusion of information in the Guinea Worm Wrap-Up does not constitute "publication" of that information.
In memory of BOB KAISER

WHO Collaborating Center for Research, Training, and Eradication of Dracunculiasis, Center for Global Health (proposed), Centers for Disease Control and Prevention, Mailstop F-22, 4770 Buford Highway NE, Atlanta, GA 30341-3724, USA, email: gwwrapup@cdc.gov, fax: 770-488-7761. The GW Wrap-Up web location is http://www.cdc.gov/ncidod/dpd/parasites/dracunculiasis/moreinfo_dracunculiasis.htm

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