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

Date: March 2, 2009

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

Subject: GUINEA WORM WRAP-UP #187

Table 1

Number of Cases Contained and Number Reported by Month during 2008*
(Countries arranged in descending order of cases in 2007)

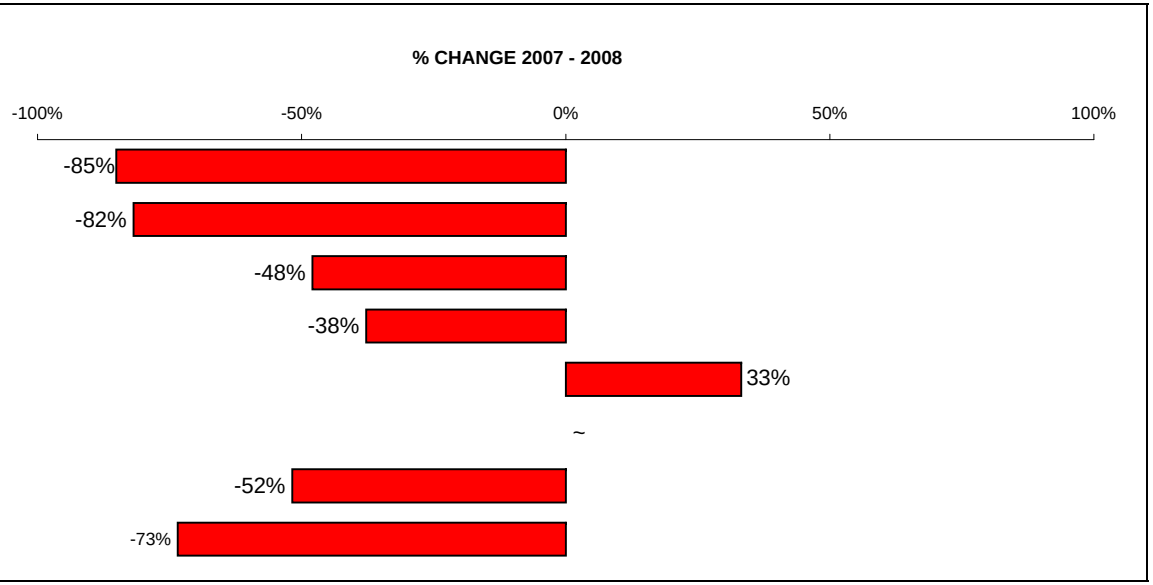
NUMBER OF CASES CONTAINED / NUMBER OF CASES REPORTED

	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL*
SUDAN	8 / 32	13 / 34	39 / 88	112 / 258	259 / 618	394 / 759	399 / 783	313 / 536	126 / 254	94 / 160	16 / 75	8 / 21	1781 / 3618
GHANA	66 / 73	63 / 80	37 / 48	60 / 68	69 / 74	57 / 73	27 / 30	12 / 13	4 / 5	8 / 8	12 / 14	11 / 15	426 / 501
MALI	1 / 1	0 / 0	0 / 0	1 / 1	16 / 16	59 / 60	111 / 120	50 / 60	48 / 72	44 / 56	20 / 27	4 / 4	354 / 417
NIGERIA	28 / 28	8 / 8	1 / 1	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	1 / 1	0 / 0	38 / 38
NIGER	0 / 0	1 / 1	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	1 / 1	0 / 1	0 / 0	0 / 0	2 / 3
ETHIOPIA**	0 / 0	0 / 0	5 / 8	22 / 25	1 / 1	3 / 3	0 / 1	0 / 1	0 / 1	1 / 1	0 / 0	0 / 0	32 / 41
BURKINA FASO	0 / 0	0 / 0	0 / 0	1 / 1	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	1 / 1
TOTAL*	103 / 134	85 / 123	82 / 145	196 / 353	345 / 709	513 / 895	537 / 93 1.84.3333 1.8148 23						

Figure 2

Number of Indigenous Cases Reported During the Specified Period in 2007 and 2008*, and Percent Change in Cases Reported

Country	Indigenous Cases Reported	
	2007	2008*
Ghana	3358	501
Niger	11	2
Nigeria	73	38
Sudan	5815	3618
Mali	313	417
Ethiopia	0	39
Total	9570	4615
All countries, excluding Sudan	3755	997



* Provisional: excludes 4 cases exported from one country to another

** Although the source of the infection of 38/41 cases reported by Ethiopia has not been established beyond all doubt so far, available evidence suggests local transmission of GWD leading to these cases was likely during 2007. Moreover, one undisputed indigenous case was reported in October 2008 in the same area of Gambella Region. Two other cases were imported from Southern Sudan.

Table 2

Number of Cases Contained and Number Reported by Month during 2009*
(Countries arranged in descending order of cases in 2008)

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	/	/	/	/	/	/	/	/	/	/	/	/	0/0	
GHANA	31/45	/	/	/	/	/	/	/	/	/	/	/	31/45	69
MALI	0/0	/	/	/	/	/	/	/	/	/	/	/	0/0	
ETHIOPIA**	0/0	/	/	/	/	/	/	/	/	/	/	/	0/0	
NIGERIA	0/0	/	/	/	/	/	/	/	/	/	/	/	0/0	
NIGER	0/0	/	/	/	/	/	/	/	/	/	/	/	0/0	
TOTAL*	31/45	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	31/45	69
% CONTAINED	69												69	
% CONT. OUTSIDE SUDAN	69												69	

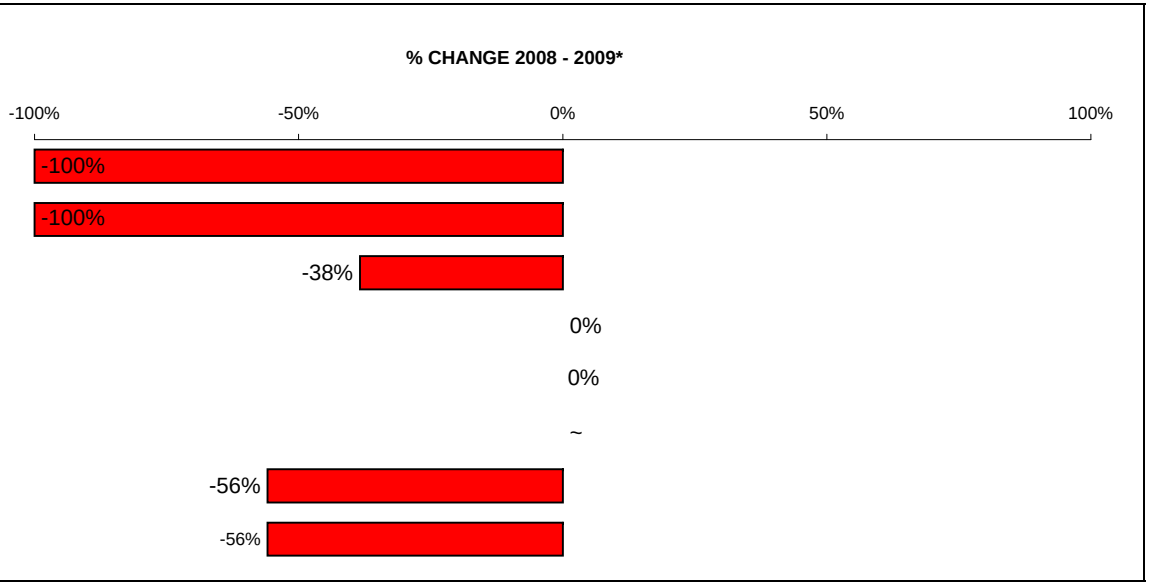
* provisional

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

Figure 3

Number of Indigenous Cases Reported During the Specified Period in 2008 and 2009*, and Percent Change in Cases Reported

Country	Indigenous Cases Reported	
	2008	2009*
Nigeria (1)	28	0
Mali (1)	1	0
Ghana (1)	73	45
Ethiopia(1)	0	0
Niger (1)	0	0
Sudan		NR
Total	102	45
All countries, excluding Sudan	102	45



* Provisional: excludes cases exported from one country to another
(1) Indicates months for which reports were received, i.e., Jan 2009

** Although the source of the infection of 38/41 cases reported by Ethiopia has not been established beyond all doubt so far, available evidence suggests local transmission of GWD leading to these cases was likely during 2007. Moreover, one undisputed ind

IMPORTED CASES:

Previous issues of the Guinea Worm Wrap-up have encouraged National Guinea Worm Eradication Programs (GWEPs) to contain and explain the probable origin of infection for each case of Guinea worm disease (GWD). Determination of the place where the patient was infected includes a detailed history of travel/movement of the patient during the preceding 10-14 months, as well as the village/locality of residence (home village) of the patient. Establishment of the place of residence is an important component that helps determine whether a case is imported from elsewhere, and necessary to avoid confusion, misinterpretation, or misuse of data gathered during a case investigation. If a person with GWD resident in one country is detected and declared a case of GWD in another country, and investigation establishes that the person was resident in the country of origin 10-14 months before, that person is declared to be an imported case of GWD by the country where the case was detected, and the country of residence of the person is immediately notified about the outcome of the case investigation.

However, the vast majority of imported cases of GWD are importations from villages, districts, regions within the same country. Sorting out where the person became infected, although often problematic, must always begin by first establishing the home village/locality of the person, and determining the travel history of the person during these 10-14 months. We have noted that in frequent instances patients with GWD are quickly labelled "imported" on the mere basis of a history of having visited another endemic village, but without consideration of whether the patient's home village and/or the village of detection are also endemic (possibility of unreported indigenous cases the year before). A mere visit to an endemic village should not necessarily make one immediately conclude that was the place where infection occurred, without first careful consideration of the following aspects:

1. Whether the visit to the endemic village is incident with the approximately one year-long incubation period, i.e., 10-14 months before the emergence of the Guinea worm.

2. Whether the village of usual residence or where the case was detected are also endemic. The investigation must clearly establish that the patient was not present either in his or her usual village of residence, or in the village where they were detected 10-14 months before the Guinea worm emerged.

3. When the village of usual residence or where the case was detected are known to have endemic transmission and it is established that the person was resident in one or the other 10-14 months ago, the case should be considered indigenous to one or the other village, even if the patient's history of travel indicates visits to other endemic villages. All interventions against transmission of GWD should be ongoing in both endemic villages.

4. Once the case investigation is concluded, the outcome of the investigation must be immediately communicated to the region, district, village where the infection is believed to have originated.

The case is only considered imported if the investigation clearly establishes that the probable source, or origin, of infection is associated with a community distinctly apart from the community where the case was detected. The GWEP would then immediately cross-notify supervisors covering the suspected area of infection to ensure that the imported case was not

already reported and to determine if there is sufficient surveillance and supervision in the area associated with the source of infection.

A non-endemic community can only be declared endemic 10-14 months after an imported case is detected when resulting indigenous cases of DCV are detected (a result of contamination of sources of drinking water) (WER, No.37 13 September 2003). Figure 4 shows three types of travel patterns that may lead to declaring cases as imported. In each scenario the detected case is imported and the source of infection is Village B. Misclassifying an imported case or confusing the residency of a case with the source of infection can

IN BRIEF

Niger: Three teams from the National Guinea Worm Eradication Pre-Certification Committee visited the field on January 12-19. One team visited Diffa, Zinder and Maradi Regions, another went to Tahoua and Niamey, and the third team visited Tillaberi and Dosso Regions. Niger's 16th Annual National Program Review was held on February 3-5, 2009.

MEETINGS

The next meeting of the International Commission for Certification of Dracunculiasis Eradication is tentatively scheduled to be held in Geneva, Switzerland during October 21-23, 2009

RECENT PUBLICATIONS AND BROADCASTS

Senior K. 2009. The end is nigh for Guinea worm disease. The Lancet 9(3):149

We regret to report the death of Dr. Jude Anosike, which occurred in Germany on December 22, 2008. Dr. Anosike was the project administrator for The Carter Center's River Blindness Program in Imo and Abia States of Nigeria in 1995-1998, and later served as a valued consultant to the Guinea Worm Eradication Program in Ebonyi State. Because of the effectiveness of his work, he was awarded a Jimmy and Rosalynn Carter Award for Guinea Worm Eradication in 2002. We extend our deepest condolences to his family.

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 the WHO Collaborating Center for Research, Training, and Eradication of Dracunculiasis, NCZVED, 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