



DEPARTMENT OF HEALTH & HUMAN SERVICES

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

Date: September 17, 2007



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

Subject: GUINEA WORM WRAP-UP #176

To: Addressees

Countdown to Glory

Consecutive months with zero indigenous cases:

Ethiopia 14

Cote d' Ivoire 11

Burkina Faso 9

Togo 8

Nigeria 5

"The past is never dead, it is not even past." William Faulkner

PROGRAM REVIEW FOR FIVE FRANCOPHONE COUNTRIES AT ABIDJAN

The annual Program Review for the five remaining endemic francophone countries was convened at Abidjan, Cote d'Ivoire on September 6-7, 2007. Cote d'Ivoire's minister of health, Dr ALLAH Kouadio Remi, opened the meeting.

- **Cote d'Ivoire** has detected no indigenous case of dracunculiasis for the past 11 consecutive months ending August 2007, and no imported case so far in 2007. It reported a total of only 5 indigenous cases, all contained, in one village in 2006 (June-September). The minister of health participated in a mobilization visit to six villages in M'bahiakro, including Lendoukro (which reported all five cases in 2006), on August 9-15. A cash reward is being offered for reporting a case of dracunculiasis (5,000 FCFA~US\$10-each to the patient, the person reporting the case, and the health worker concerned) and a national pre-certification committee was named in 2007.
- **Burkina Faso** has detected no indigenous case of dracunculiasis for the past 9 months. One of the 2 cases imported from Ghana into 2 Burkinabe villages so far this year was contained. Both villages have a safe water supply. This country reported 5 cases of dracunculiasis (3 contained) in 2006 (July-November). Burkina Faso began offering rewards in-kind (a blanket, mat, bucket, 2 t-shirts and 2 GW cassettes) for reporting of a case this year. A national pre-certification committee will be established in October 2007.
- **Togo** has detected no indigenous case of dracunculiasis for the past 8 months. It contained one of 2 cases imported from Ghana this year. The uncontained case's village has a source of safe water. Togo reported 29 cases in 2006 (79% contained), including 2 uncontained cases in November-December. Togo does not offer a reward for reporting of a case of Guinea worm disease. It established a national pre-certification committee in July 2006.
- **Niger** has reported 5 indigenous cases of Dracunculiasis (Figure 6), all contained, in 3 localities in January-September 2007, vs. 50 cases in the same period of 2006, when a total of 110 cases (83% contained) were reported. The peak transmission season is in August-

- November. Niger offers a reward of 5,000 FCFA (similar to Mali and Cote d'Ivoire) for reporting a case of dracunculiasis. It plans to establish a national pre-certification committee later in 2007.
- **Mali** has reported 123 cases of dracunculiasis (26% contained) in 25 villages in January-August 2007, vs. 108 cases in 44 villages in the same period of 2006 (329 cases, 82% contained, in all of 2006), an increase of 18% in cases and a decrease of 43% in villages. Two localities in Kidal Region reported 86 cases, none contained, in June-August 2007 due to an undetected infected young male Tuareg who visited one of the localities from an endemic area of Ansongo District last year. The program has put interventions in place (trained volunteers, health education, filters, Abate), but is constrained by recent insecurity in the area. Except for Kidal, Mali reduced cases by 81% and contained 82% this year. Mali's peak transmission season is August-November. Mali offers a cash reward of FCFA 5,000 for reporting of a case. A national pre-certification committee will be established in 2008.

Participants at this meeting discussed Ghana's Guinea worm situation for about half an hour. The national program coordinator for Cote d'Ivoire, Dr. BROU AKA Noel, led his country's delegation to the meeting. They were joined briefly by the former national program coordinator, Dr. BOUALOU Henri, during the opening ceremony. All of the main external partners of the Ivorian program (WHO, UNICEF, MAP International, The Carter Center) except Health and Development International participated in the review. WHO also convened a meeting for pre-certification Francophone countries immediately preceding this Program Review.

GHANA: SALIENT SAVELUGU

Savelugu-Nanton District in Ghana's Northern Region has accounted for 63.5% (1,988/3,132), or nearly two-thirds of Ghana's cases of dracunculiasis in January-July 2007 (Figure 2). So far this year, the district has reported 1,204 more cases than during the same time last year. The increase in cases of dracunculiasis during 2007 in this district is primarily due to the breakdown of the potable water supply system serving the Northern Region's capital, Tamale (population circa 250,000), during February-March 2006, which also supplies drinking water to Savelugu Town (population circa 30,000). The new or refurbished Tamale potable water supply system is not expected to be completed until August 2008. Except for Savelugu-Nanton district, the overall number of cases of dracunculiasis in Ghana is down by 45% compared to the same period of 2006. The cumulative number of endemic villages reporting indigenous cases of dracunculiasis is also down significantly so far this year (Figure 1). The primary sources of transmission of dracunculiasis in this district are believed to be small ponds on farms, and large dams that provide water for some larger communities (Savelugu Town alone has four large dams that are sources of drinking water). The peak transmission season is October-April.

Savelugu-Nanton District is located in the central part of Northern Region, just north of the regional capital of Tamale. It comprises a population of about 109,000 in an area of about 1,791 square kilometers. The population belongs mostly to the Dagomba ethnic group. The district reported a total of 1,182 cases of Guinea worm disease in 41 villages in 2006, of which 900 (76%) were contained, including 141 (12%) in the two Case Containment Centers. 51% of cases were under 15 years of age, but the male to female ratio of patients was 1.6:1. 1,027 of last year's 1,182 cases were reported from only six villages and towns in the district (Figure 3), all of which reportedly had filters in 100% of their households. Known water sources in all six communities were treated with ABATE® Larvicide for 2-11 months during 2006. However some Community/Farm Ponds were only detected in the 2007 transmission season.

Adequate safe drinking water existed only in the third-highest endemic village (Zoosali), since July 2005. None of the other top six communities had adequate safe drinking water at the end of 2006, but all had at

least one safe source (Figure 3). The director-general of the Ghana Health Service visited the district in July 2006, pipe filters were redistributed in September/October, the two Case Containment Centers at Savelugu Town and Diare were upgraded in November, and a Worm Week was held in the district in November.

Savelugu-Nanton District has reported a total of 1,988 cases in 32 communities in January-July 2007, of which 1,593 (82%) were contained (including 295 (15%) in the two Case Containment Centers). This is an increase of 153% from the same period of 2006. 61% of patients are under 15 years old, and 57% are male. About 650 volunteers of various types are working on Guinea worm eradication at various levels in the district, in addition to staff of the Ghana Health Service, a JICA volunteer, a Peace Corps Volunteer and an international technical assistant provided by The Carter Center. Three new US Peace Corps Volunteers are scheduled to begin working on the program at Savelugu, Diare/Zoosali, and Tampion in December. The following interventions have been implemented so far in 2007; on January 16, 2007, adequate safe water became available in Diare and Nanton. (By September 2007, adequate safe water should also become available in Tampion; Savelugu is not scheduled to get adequate safe water until August 2008.) 33,611 cloth filters and 26,135 more pipe filters were distributed in the district during the first six months of 2007 (estimated coverage for filters is 100%, treated at least once with abate this year 77%, and health education 100%). In July, the District Assembly passed several bylaws sanctioning fines for anyone entering a water source with an emerging Guinea worm.

Figure 1

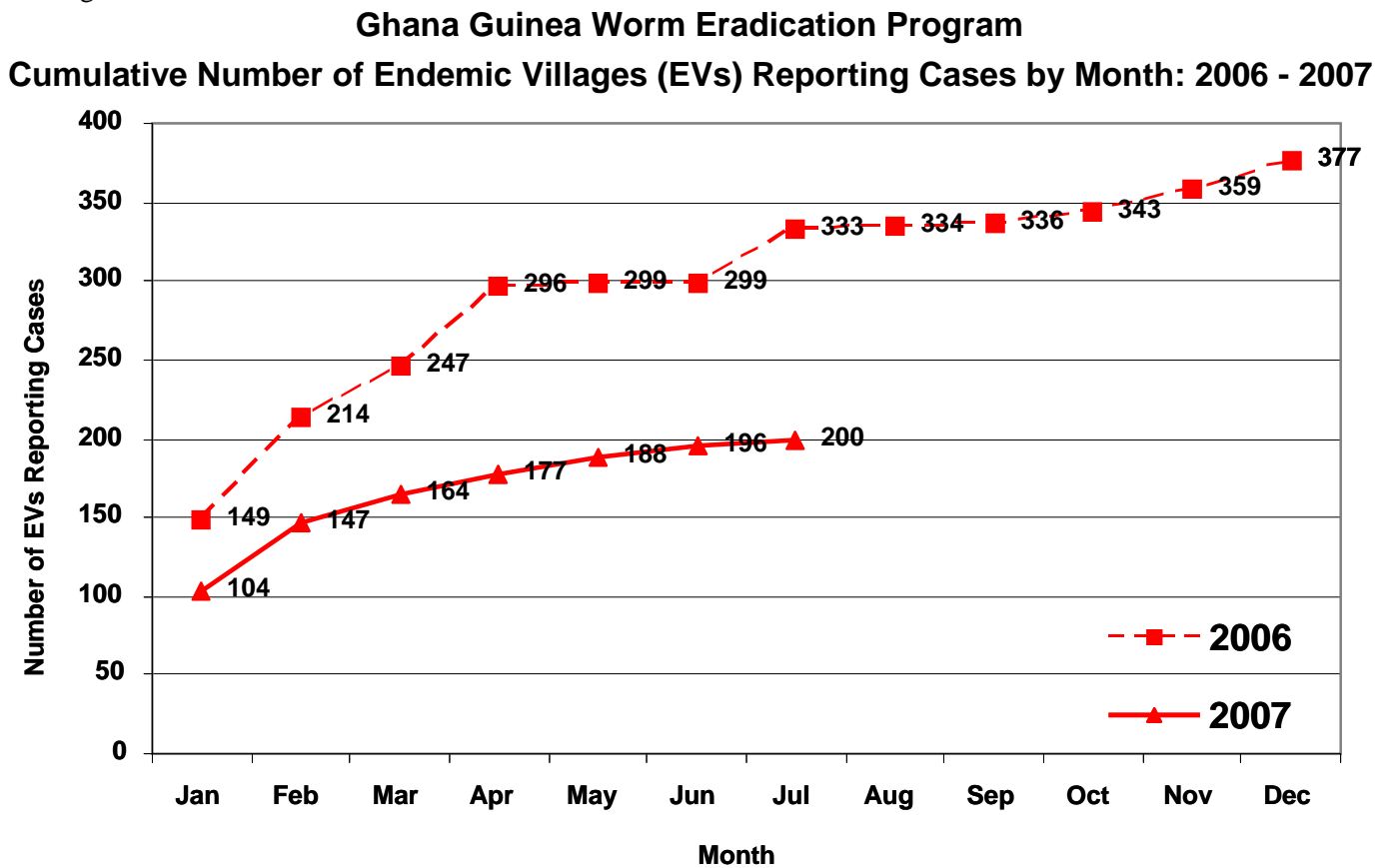
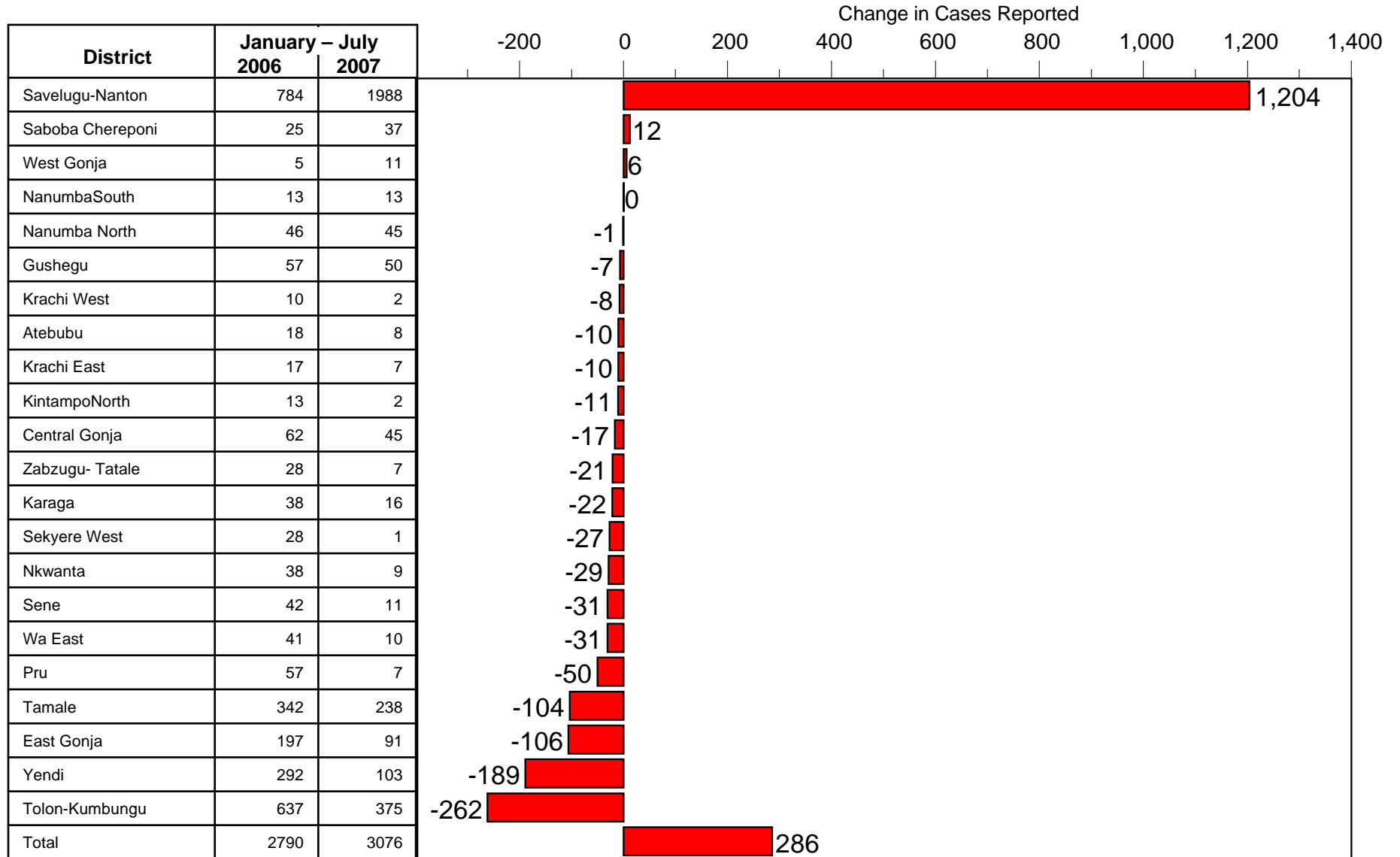


Figure 2

GHANA GUINEA WORM ERADICATION PROGRAM

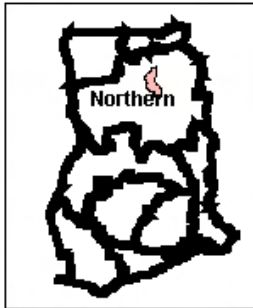
Absolute Change in Number of Cases of Dracunculiasis Reported by the Top 22 Districts During January - July 2006 and January - July 2007*



* provisional

Figure 3

Ghana Guinea Worm Eradication Program Savelugu-Nanton District: Jan-Jul 2007 (provisional)



Community	Cases 2006	Cases 2007
Savelugu *	411	1,350
Diare *	298	286
Zoggu	140	50
Zoosali	89	13
Tampion	54	69
Nanton	35	5
Sandu	15	40
Gushei	11	37

* Location of Case Containment Center

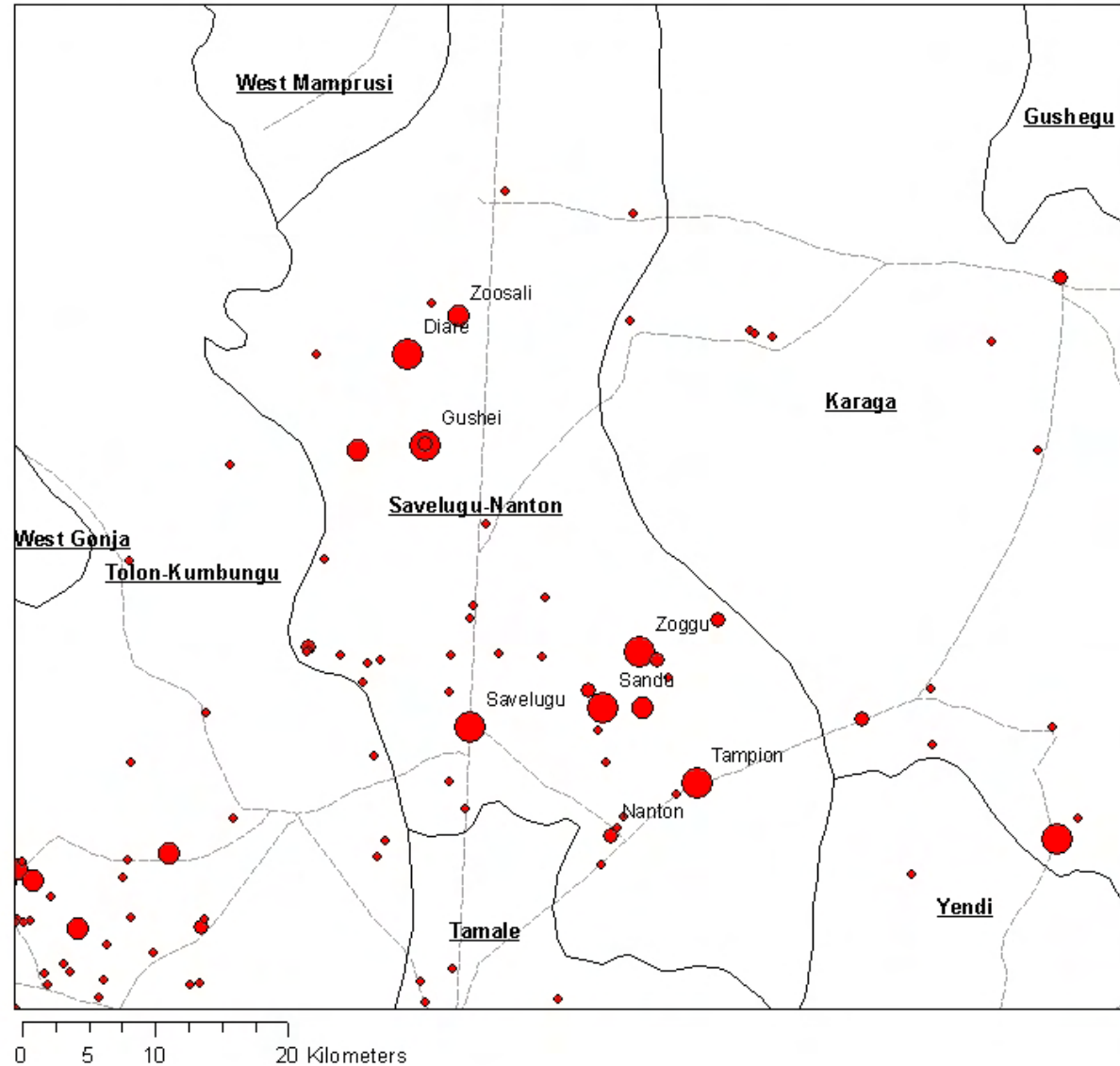
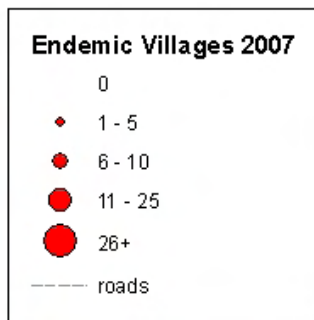


Table 1

Number of Cases Contained and Number Reported by Month during 2007*
(Countries arranged in descending order of cases in 2006)

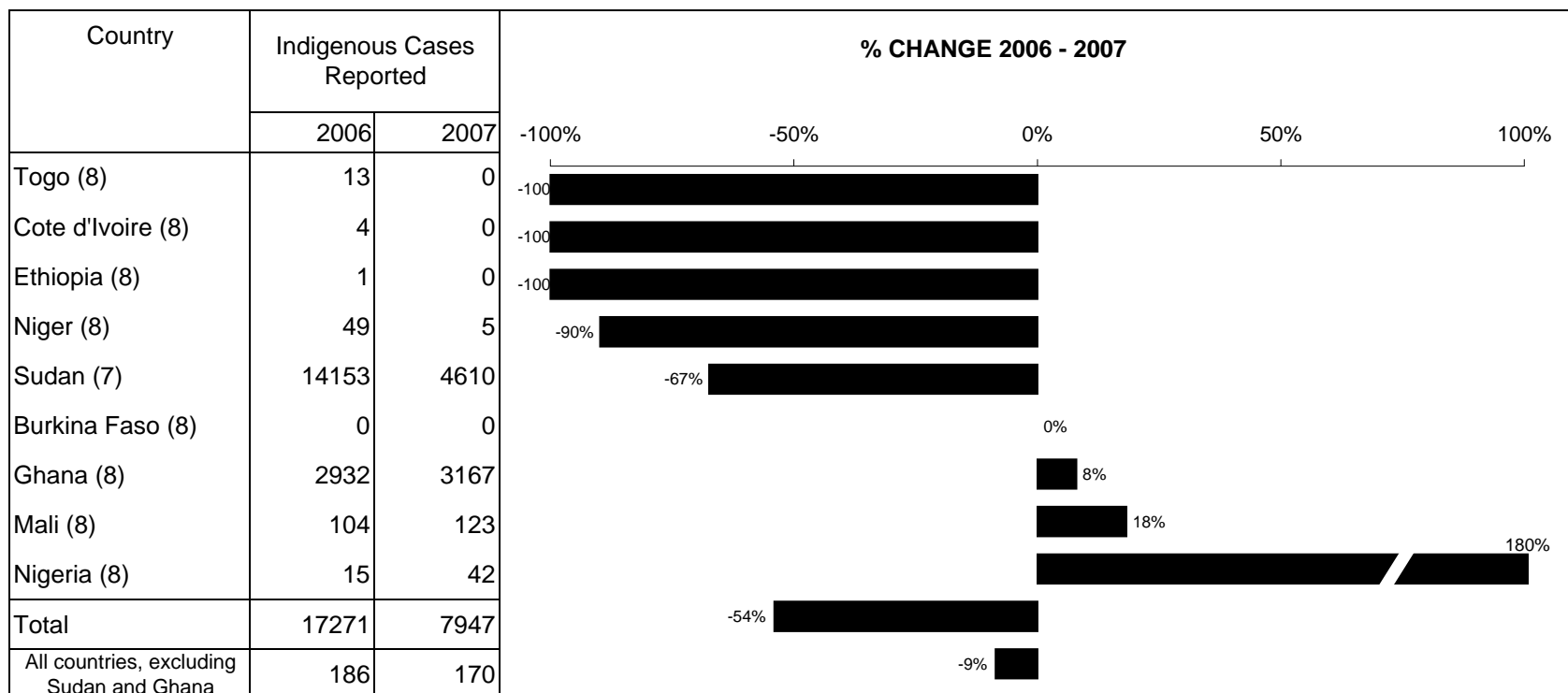
COUNTRIES REPORTING CASES	NUMBER OF CASES CONTAINED / NUMBER OF CASES REPORTED													% CONT.
	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL*	
SUDAN	42 / 204	49 / 187	79 / 222	274 / 549	623 / 1177	591 / 1407	309 / 864	/	/	/	/	/	1967 / 4610	43
GHANA	814 / 1006	633 / 733	441 / 478	249 / 292	232 / 271	184 / 241	90 / 111	37 / 40	/	/	/	/	2680 / 3172	84
MALI	0 / 0	0 / 0	1 / 1	0 / 0	0 / 0	1 / 1	4 / 6	26 / 115	/	/	/	/	32 / 123	26
NIGER	3 / 3	0 / 0	0 / 0	0 / 0	1 / 1	0 / 0	1 / 1	0 / 0	/	/	/	/	5 / 5	100
NIGERIA	7 / 32	9 / 9	1 / 1	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	/	/	/	/	17 / 42	40
TOGO	0 / 0	1 / 1	0 / 0	0 / 1	0 / 0	0 / 0	0 / 0	0 / 0	/	/	/	/	1 / 2	50
BURKINA FASO	2 / 2	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	/	/	/	/	2 / 2	100
COTE D'IVOIRE	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	/	/	/	/	0 / 0	0
ETHIOPIA	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	3 / 3	0 / 0	0 / 0	/	/	/	/	3 / 3	0
UGANDA	0 / 0	0 / 0	1 / 1	0 / 0	1 / 1	0 / 0	0 / 0	1 / 1	/	/	/	/	3 / 3	100
TOTAL*	868 / 1247	692 / 930	523 / 703	523 / 842	857 / 1450	779 / 1652	404 / 982	64 / 156	0 / 0	0 / 0	0 / 0	0 / 0	4710 / 7962	59
% CONTAINED	70	74	74	62	59	47	41	41					59	
% CONT. OUTSIDE SUDAN	79	87	92	85	86	77	81	41					82	

* 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 2006 and 2007*, and Percent Change in Cases Reported



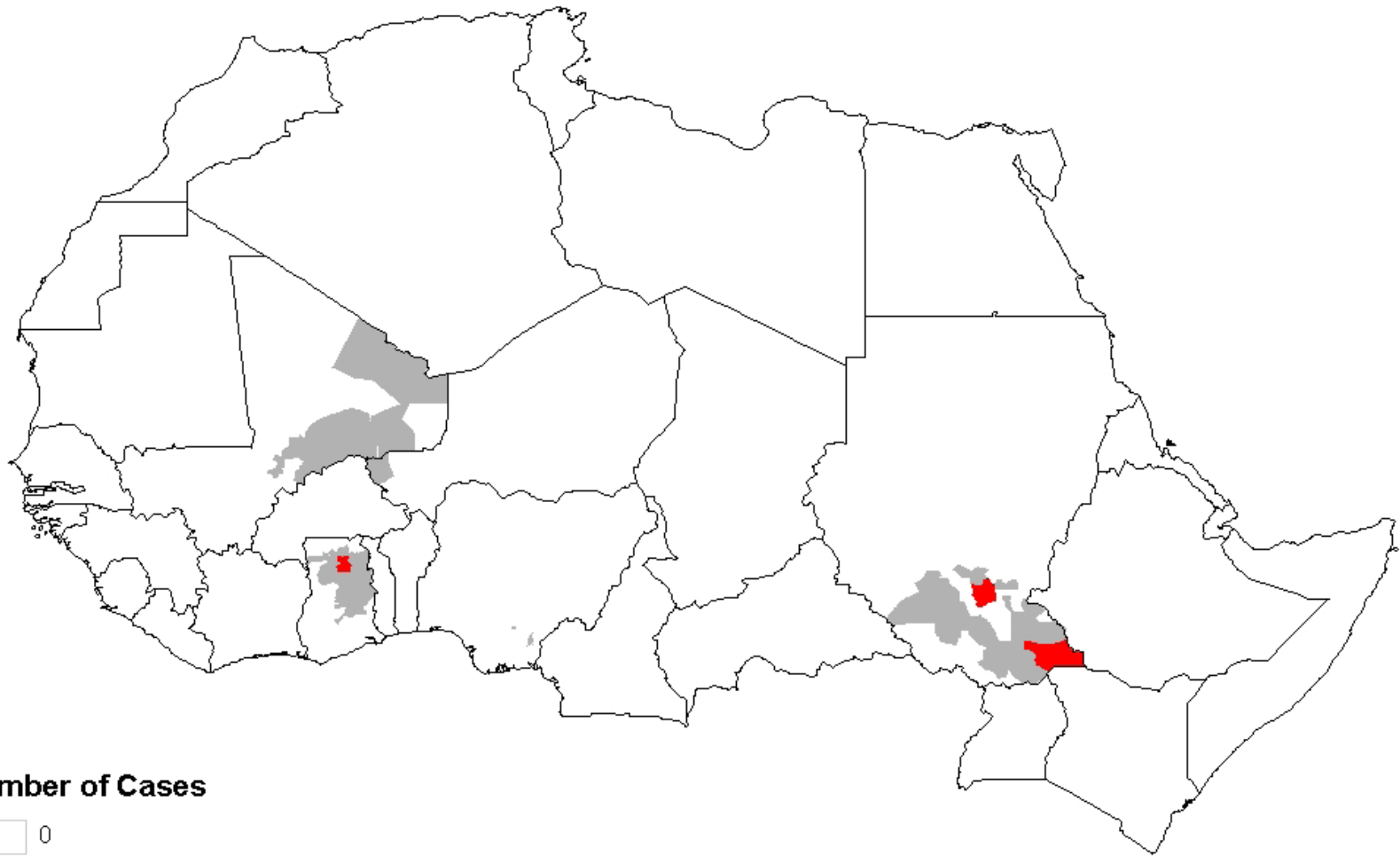
Overall % change outside of Sudan = 7%

(7) Indicates months for which reports were received, i.e., Jan. -July

* Provisional

Figure 5

Distribution of 7,947 Indigenous Cases of Dracunculiasis: 2007*



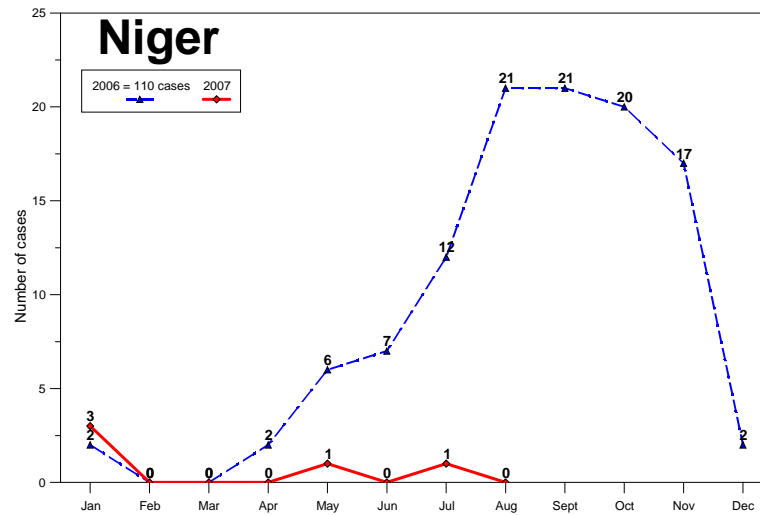
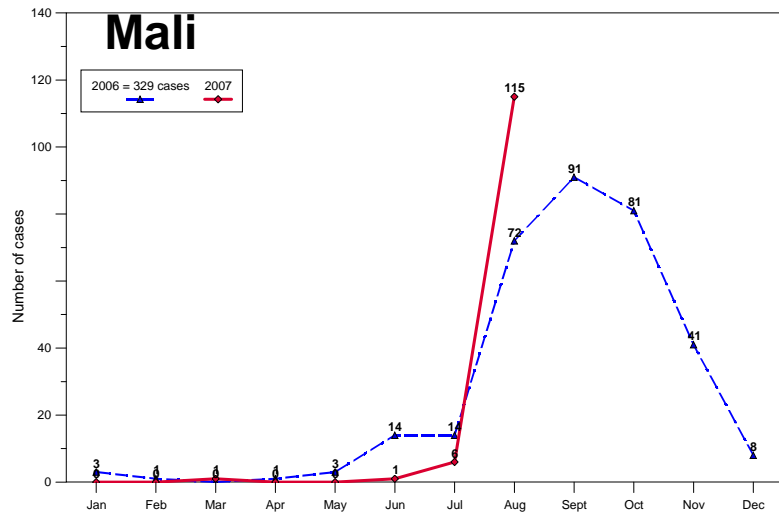
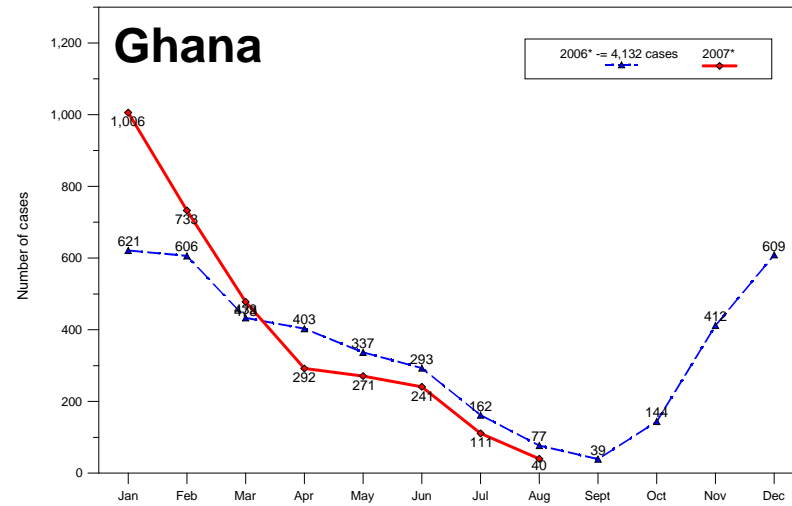
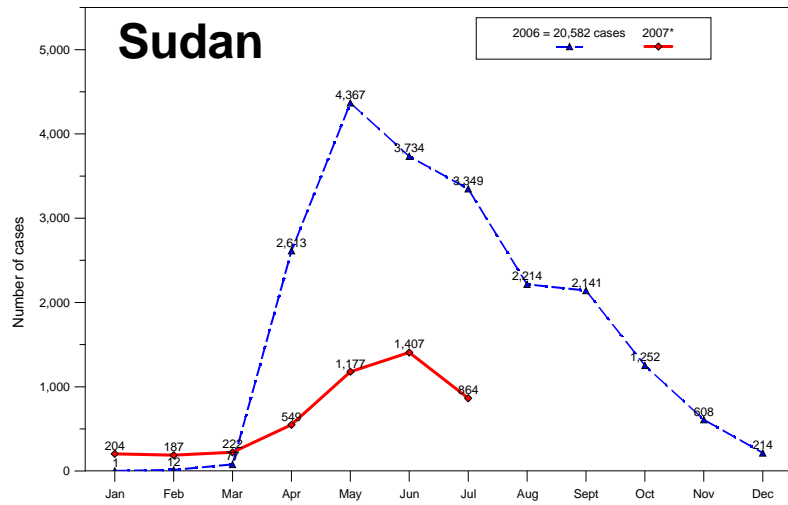
Number of Cases

- 0
- 1 - 99
- 100 +

*provisional Jan - Aug., 2007

Figure 6

Number of Reported Cases of Dracunculiasis: 2006 – 2007*



* provisional

FIGHTING GUINEA WORMS IN AYOD COUNTY, JONGLEI STATE, SOUTHERN SUDAN

Technical Advisor Coby Jensen reports that currently there are 229 villages which she helps to monitor from Ayod Town, including 7 Field Officers and, about 32 Area Supervisors. To supervise the work of these Field Officers and Area Supervisors, including holding monthly meetings requires walking long distances (3-4 days one way) particularly during the rainy season which makes traveling by vehicle or motorcycle impossible. One challenge for her, writes Coby “is trying to supervise and coordinate supervisory visits with the GWEP staff in the field”, which during the rainy season (also the peak transmission season for GWD) requires her to have a walking companion and be able to tag-team with staff in the field. “In the past pre-determined plans to meet in specific places were often foiled because if the rain catches you on the way, it can delay your journey by one or two days (it simply takes longer to walk in thick fresh mud..., the Field Officer assumes plans have changed, gives up waiting, and moves on to continue supervising Area Coordinators and village volunteers.” Thuraya telephones recently provided to Field Officers by the GWEP will help with the coordination of place and time of meetings in the endemic areas and make supervision more effective. Coby reports that transmission of dracunculiasis from 8 of 17 cases of dracunculiasis detected in August was contained, and that geographic coordinates for almost all of the 229 villages have now been obtained.

Southern Sudan has reported 4,610 cases of Dracunculiasis (43% contained) during January – July 2007 (Table 1), a 67% reduction from 14,153 reported during the same period in 2006 (Figure 4).

MEETINGS AND CONSULTATIONS

WHO consultation to Nigeria, September 17-28, 2007 to assess the status of interventions and surveillance in the GWEP, including in formerly endemic areas.

Program Review for Nigerian GWEP, October 22-24, 2007, Abuja, Nigeria.

Meeting for Anglophone pre-certification countries and areas (Ethiopia, Kenya, northern Sudan, Uganda), October 30-31, 2007, Addis Ababa.

Detect Every Case, Contain Every Worm!

*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>.



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