<u>Expect the Worm</u> in Kapoeta East, Tonj North, Tonj East, Awerial, Kapoeta North, Tonj South, Terekeka, Kapoeta South, Pibor and Gogrial East Counties that reported 98% of all cases in 2010, and in the 237 villages reporting indigenous cases so far in 2010. Monitor households in 2011 of all patients who had the disease in 2010 (Figures 2 and 3). Anticipate possible increased cases as a result of insecurity in 2010 so far: in Eastern Equatoria in March (Kapoeta County/Kaldo payam), June (Kapoeta East County & payam); in Warrap in January-July, October; and in Central Equatoria/Lakes in February, March, June, August.

<u>Expect the Worm</u> wherever people are living and working a year after cases appeared in their area in 2010, whether in their village, farm, garden, cattle camp or elsewhere. Note the age and sex distribution of cases that occurred in 2010 in your area and use that to help predict where transmission is occurring (Figure 4). The ethnic groups mostly affected by dracunculiasis in Southern Sudan are the Dinka (53%) and the Toposa (42%) of all cases reported in 2010, so far.

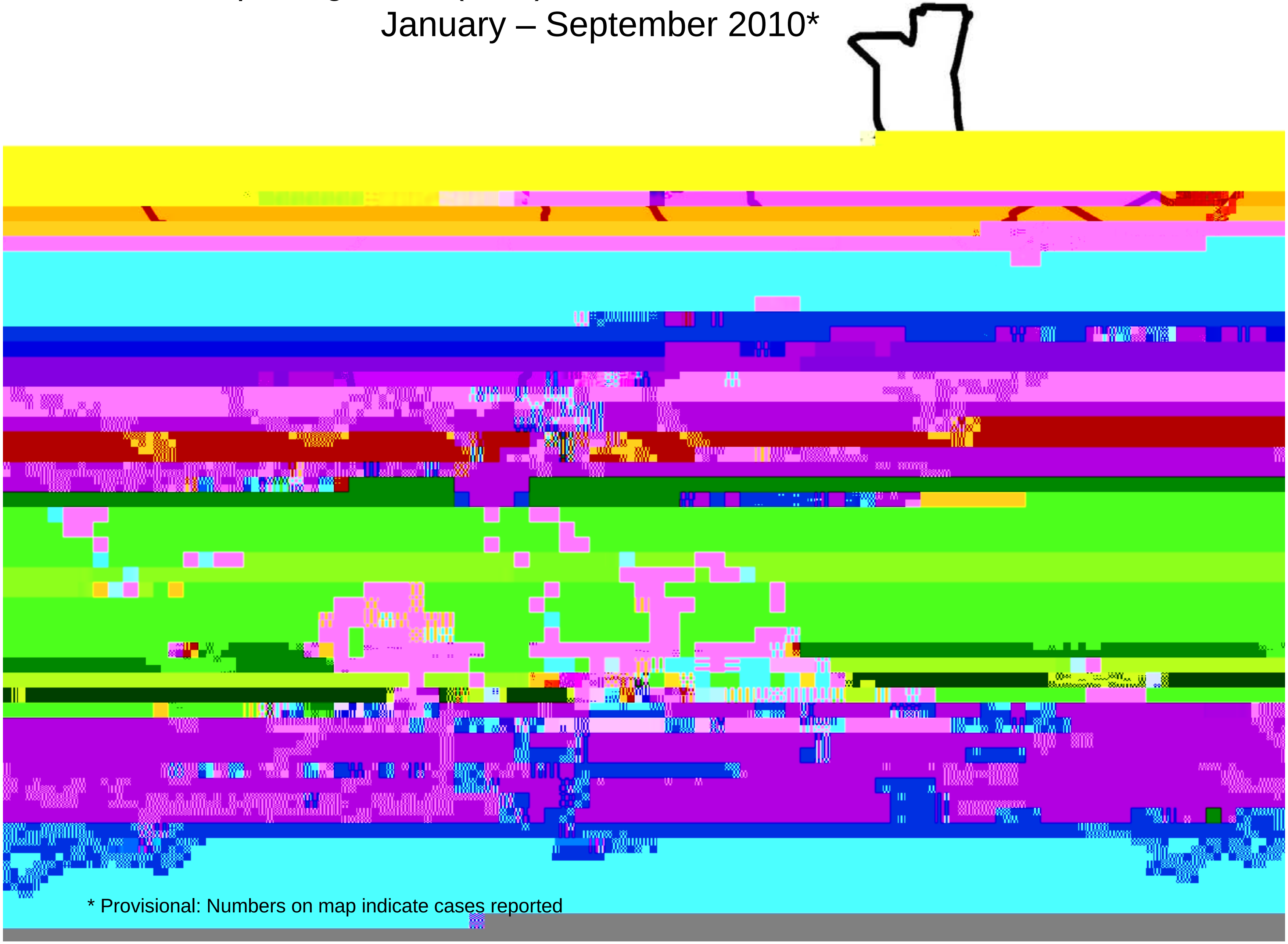
Although the SSGWEP reported 1,549 confirmed cases of Guinea worm disease (GWD) during January-September 2010, the Weekly Epidemiological Bulletin of the Ministry of Health/Government of South Sudan's Integrated Disease Surveillance and Response (IDSR) system, which is supported by the United States Agency for International Development (USAID) and the World Health Organization (WHO), has reported <u>5 suspected</u> cases of GWD in Week # 25: 21-27 June) and <u>one suspected</u> case (in Week #37: 13-19 September 2010), during January-September. Since GWD is included among the communicable diseases reported through the IDSR system, and since such system is designed to report confirmed cases of those disease, its reports should reflect the number of cases confirmed by the SSGWEP each month. These data are reported monthly by the SSGWEP to all partners, including the ministry of health, and could easily be incorporated into the IDSR reports. Standard operating procedure of the SSGWEP since 2006 has been the preparation of quadruplicate carbonized copies of its monthly reports from all endemic areas, and which are earmarked for the recipients below.

- One copy remains at the local level SSGWEP sub-office (payam).
- One copy for the county health department
- One copy for the stat health department, and
- One copy for the SSGWEP national secretariat.

That incongruity should be corrected. To be useful, the IDSR should include all available data for <u>confirmed</u> cases of GWD, as well as for other communicable diseases on which it reports. Since the IDSR disease reports are first received and consolidated at the county level, it is apparent that practical arrangements between the county level public health surveillance office (in endemic counties) and the SSGWEP, to facilitate the transfer of a copy of the monthly SSGWEP report about confirmed cases of GWD, are needed to ensure the IDSR captures current and future data on GWD in the system. In areas now free of GWD in Southern Sudan, where the SSGWEP is not present (because there is no transmission to interrupt), the practical communication and reporting linkages between the county level surveillance staff and communities at large to capture information about possible imported cases of GWD are not yet fully evident.

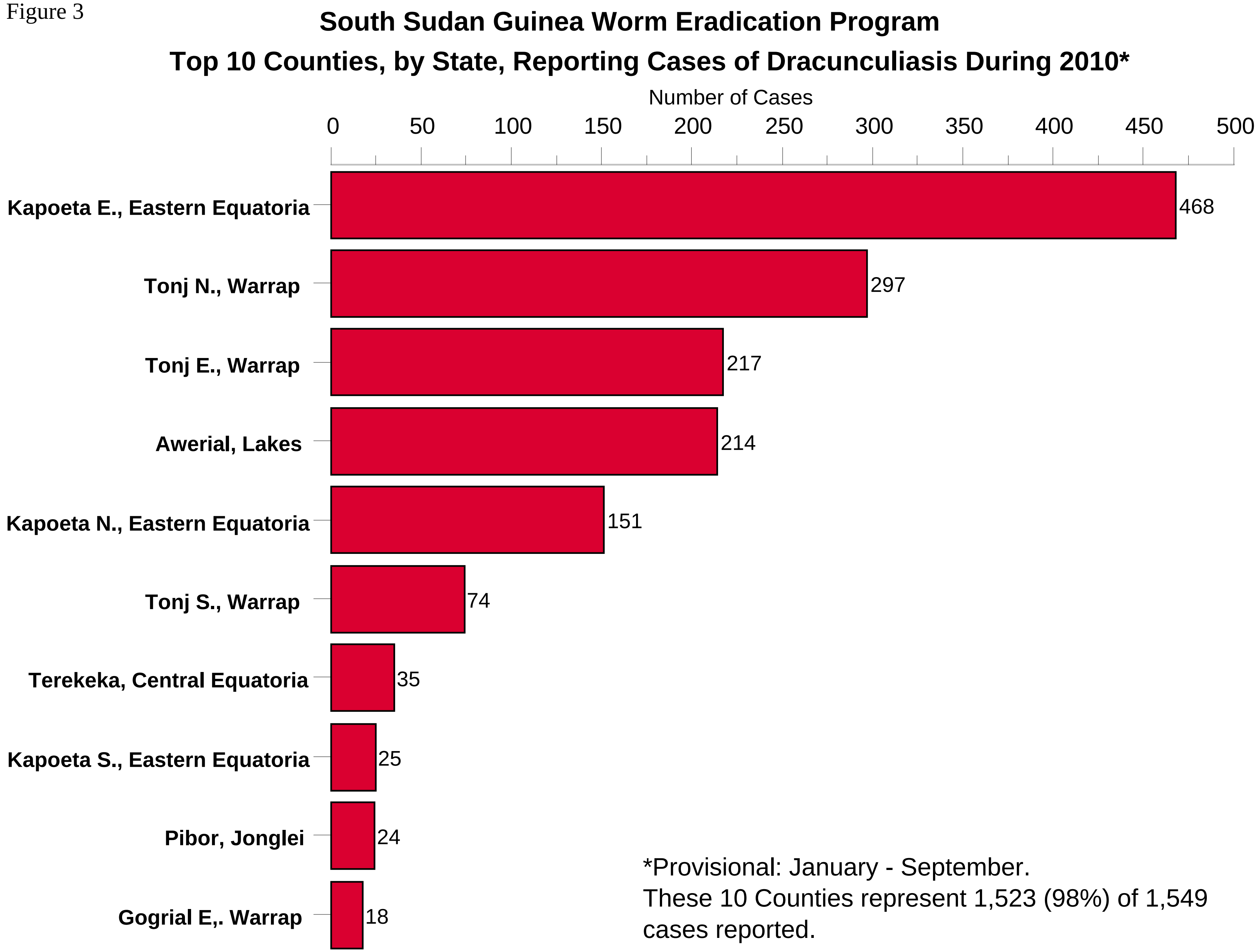
Figure 2

South Sudan Guinea Worm Eradication Program
10 Counties Reporting 1,523 (98%) of 1,549 Cases of Guinea Worm Disease: January – September 2010*

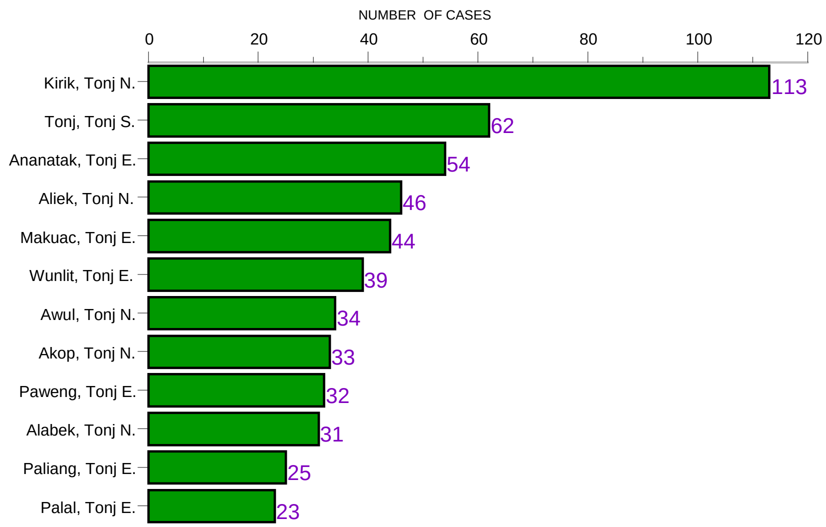


* Provisional: Numbers on map indicate cases reported

Figure 3


South Sudan Guinea Worm Eradication Program
Top 10 Counties, by State, Reporting Cases of Dracunculiasis During 2010*
Number of Cases
0
50
100
150
200
250
300
350
400
450
500
Kapoeta E., Eastern Equatoria
468
Tonj N., Warrap
297
Tonj E., Warrap
217
Awerial, Lakes
214
Kapoeta N., Eastern Equatoria
151
Tonj S., Warrap
74
Terekeka, Central Equatoria
35
Kapoeta S., Eastern Equatoria
25
Pibor, Jonglei
24
Gogrial E,. Warrap
18
*Provisional: January - September.
These 10 Counties represent 1,523 (98%) of 1,549 cases reported.

SOUTH SUDAN GUINEA WORM ERADICATION PROGRAM



SOUTH SUDAN GUINEA WORM ERADICATION PROGRAM
AGE AND GENDER OF 606 REPORT

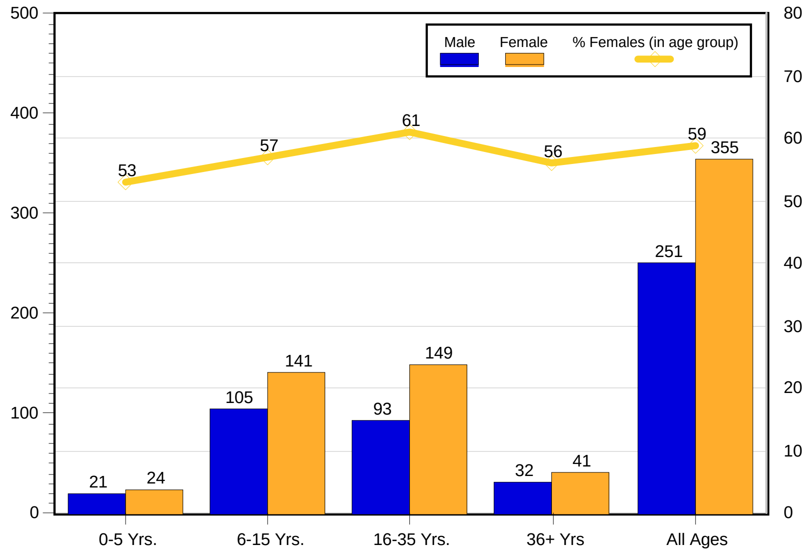


Table 1

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*
SUDAN	6 / 7	22 / 36	80 / 113	119 / 159	147 / 190	176 / 239	274 / 359	229 / 289	120 / 157	/	/	/	1173 / 1549
GHANA	2 / 2	3 / 3	1 / 1	1 / 1	1 / 1	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	/	/	8 / 8
MALI	0 / 0	0 / 0	0 / 0	0 / 0	1 / 1	0 / 0	4 / 6	6 / 6	13 / 19	17 / 18	/	/	41 / 50
ETHIOPIA^	0 / 0	1 / 1	2 / 2	6 / 6	1 / 2	1 / 2	1 / 1	2 / 2	1 / 1	1 / 1	/	/	16 / 18
CHAD	0 / 0	0 / 0	0 / 0	0 / 0	0 / 1	0 / 1	0 / 0	/	/	/	/	/	0 / 2
NIGER^	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	2 / 2	/	/	2 / 2
TOTAL*	8 / 9	26 / 40	83 / 116	126 / 166	150 / 195	177 / 242	279 / 366	237 / 297	134 / 177	20 / 30	/	/	1240 / 1629
% CONTAINED	89	65	72	76	77	73	76	80	76	67			76
% CONT. OUTSIDE SUDAN	100	100	100	100	60	33	71	100	70	67			84

* provisional

^ Ethiiopia reported and imported case from Southern Sudan in June, and Niger reported two imported cases from Mali in October.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.

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*
SUDAN	4 / 12	12 / 18	39 / 47	134 / 221	277 / 428	388 / 458	434 / 521	452 / 543	240 / 275	104 / 141	39 / 55	11 / 14	2134 / 2733
GHANA	40 / 45	49 / 50	50 / 52	27 / 28	30 / 34	18 / 19	6 / 7	1 / 1	1 / 1	2 / 3	0 / 0	1 / 2	225 / 242
MALI	0 / 0	0 / 0	0 / 0	0 / 0	1 / 1	7 / 7	14 / 23	34 / 43	48 / 68	23 / 34	5 / 7	3 / 3	135 / 186
ETHIOPIA	0 / 0	0 / 0	2 / 2	6 / 6	2 / 5	6 / 8	2 / 2	1 / 1	0 / 0	0 / 0	0 / 0	0 / 0	19 / 24
NIGERIA	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0
NIGER	0 / 0	0 / 0	0 / 1	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	1 / 2	0 / 1	1 / 1	0 / 0	2 / 5
TOTAL*	44 / 57	61 / 68	91 / 102	167 / 255	310 / 468	419 / 492	456 / 553	488 / 588	290 / 346	129 / 179	45 / 63	15 / 19	2515 / 3190
% CONTAINED	77	90	89	65	66	85	82	83	84	72	71	79	79
% CONT. OUTSIDE SUDAN	89	98	95	97	83	91	69	80	70	66	75	80	83

* provisional

^ Niger reported 5 imported cases: 1 from Ghana and 4 from Mali.

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

IN BRIEF

The number of reported and contained cases of dracunculiasis, by country, during January – September 2010 are shown in Table 1 and 2, and the percentage change in cases during this period versus January-September 2009 is shown in Figure 6. An update about dracunculiasis in Chad is summarized in Table 3.

Table 1

Countdown to Eradication

Country	Cases Jan-Sept 2010	% Cases Contained	% Reduction 2009-2010
SUDAN	1,549	76%	39%
MALI	49	86%	72%
ETHIOPIA	18	89%	29%
GHANA	8	100%	97%

* Provisional: January - October

Ethiopia has reported 17 indigenous cases from 8 villages in January-October 2010, plus one case imported from Southern Sudan in June. All of the indigenous cases occurred in Gog woreda of Gambella Region.

Mali exported two cases to Niger in October. One patient, a 35 year old man, was detected and containment of transmission was begun on the same day his worm emerged in Niamey: October 1st. He arrived in Niger on August 8, 2010 from Gourma Rharous District of Timbuktu Region, and had spent four months in Algeria immediately before that. The other case, a 20 year old man, arrived in Tillaberi District on September 23, 2010 and was immediately placed under observation (with signs suspected of dracunculiasis). A Guinea worm emerged on October 12th and measures to contain transmission were begun the same day. Ironically, both men indicated “water vending” was their occupation. Both patients are residents of Gossi (reporting 6 cases, 5 contained), in Gourma Rharous District of Timbuktu Region in Mali during January -September.

STATUS OF DRACUNCULIASIS IN NIGER AND BURKINA FASO ASSESSED BY INTERNATIONAL CERTIFICATION TEAMS (ICTS)

In follow-up of Niger’s claim of having interrupted transmission of dracunculiasis in 2008, the World Health Organization (WHO) sent an external evaluation team to visit Niger during September 15-30, 2010. The team was led by Dr. Abolhassan Nadim, a member of the International Commission for the Certification of Dracunculiasis Eradication (ICCDE) and included Mr. Adam Thomas of UNICEF/Ghana, Dr. Kimberly Mace of CDC, Dr. L.Theodore Kangoye of Burkina Faso, Mr. Alto Oumarou of CERMES/Niamey, and Mr. Sadi Moussa, Dr. Salissou Adamou and Mr. Aboubacar Adakal of the Ministry of Health, Niger. Facilitators included Drs. Alhouseini Maiga and Dieudonné Sankara of WHO, national GWEP coordinator Mr Harou OumarouM r H a r o u .

The origin of these cases remains unknown as is the number of villages with endemic transmission of dracunculiasis. None of these patients is known to have traveled outside of Chad in recent times, suggesting that dracunculiasis was reintroduced in Chad sometime after the national program stopped it about ten years ago, or that transmission in Chad was never interrupted and smoldered along undetected for years, despite previous assessments of Chad's efforts to maintain surveillance for cases of dracunculiasis.

RECENT DONATIONS

The World Food Program provided a donation - under its long-established food-for-training (FFT) program in Southern Sudan – to support and train monthly more than 8,000 volunteer staff (village volunteers and area supervisors) of th

DEFINITION OF CASE CONTAINMENT

A case of Guinea worm disease is contained if all of the following conditions are met:

1. The patient is detected before or within 24 hours of worm emergence, **and**
2. The patient has not entered any water source since the worm emerged, **and**
3. The village volunteer has properly managed the case, by cleaning and bandaging until the worm is fully removed, and by giving health education to discourage the patient from contaminating any water source (if two or more emerging worms are present, the case is not contained until the last worm is pulled out), **and**
4. The containment process, including verification that it is a case of Guinea worm disease, is validated by a supervisor within 7 days of the emergence of the 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, CGH, 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/guineaworm/
Back issues are also available on the Carter Center web site English and French are located at
http://www.cartercenter.org/news/publications/health/guinea_worm_wrapup_english.html.
http://www.cartercenter.org/news/publications/health/guinea_worm_wrapup_francais.html