



**Burkina Faso** reported only 20 indigenous cases (and 6 imported cases, 3 from Ghana and 3 from Mali) in 13 villages in January-July 2004, compared to 114 indigenous cases in the same period of 2003, for a reduction of -82%. Transmission was contained in 18 (69%) of the 26 cases reported. This program is considering introducing cash rewards for reporting of cases next year.

**Cote d'Ivoire** reported 16 indigenous cases (and 1 case imported from Ghana) in 6 villages in January-July 2004, compared to 42 indigenous cases in the same period of 2003, for a reduction of -62%. Transmission was contained in 7 (41%) of the 17 cases reported. Seven of this year's cases were

Table 2

**Status of Key Indices of 2004\***

Country	# villages reporting 1+ cases	# villages reporting only 1 case	# cases reported in 2004*	% cases contained	Percentage of Endemic Villages			
					with filters in 100% of households	provided health education	where ABATE® used	with 1+ source of safe water
Ghana**	854		5667	61%	84%	100%	47%	45%
Mali	27	22	46	78%	100%	100%	7%	7%
Togo	79	50	191	64%	100%	100%	100%	54%
Niger	28	18	66	79%	100%	100%	47%	0%
Burkina Faso	13	10	26	67%	100%	70%	37%	70%
Cote d'Ivoire	6	3	17	38%	62%	100%	79%	93%
Benin	1	0	3	100%	100%	100%	100%	100%
Mauritania	3	3	3	100%	100%	100%	0%	100%

\* provisional January - July

\*\* January - June

**ANNUAL REVIEW OF THE GUINEA WORM ERADICATION PROGRAMS (GWEPs) OF  
ENDEMIC FRANCOPHONE COUNTRIES  
ACCRA, GHANA, AUGUST 18-20, 2004**

GENERAL RECOMMENDATIONS

1. The ministries of health of the endemic countries, in collaboration with their partners, should implement a six-month follow-up of the level of implementation of the “Geneva Declaration on Dracunculiasis Eradication”.
2. The GWEPs should ensure the effective use, at all levels of the program, of the definitions and standards (revised) published in May 2003 in the WHO Weekly Epidemiological Record [Rapport Epidémiologique Hebdomadaire] (No. 37).
3. All the endemic countries reporting few cases of Guinea worm disease (GWD) should investigate, immediately and seriously, the history of each case, i.e., the travel history, including residences during travel, in order to determine the probable origin of the infection.
4. The GWEPs should report on the status of the recommendations set forth in the annual meeting of Program Managers held in Bamako, Mali (March 2004), and use these to formulate quantifiable goals to be reached in their 2005 action plan.
5. The GWEPs should check the efficacy of ABATE® larvicide treatments regularly; a protocol which could be used in this context is in the process of being developed by the WHO.
6. Each GWEP national coordinator should evaluate, at mid-year, the level of success in reaching its program’s annual goals.
7. Those villages receiving borehole wells in Togo, Niger, and Mali from the Gates Guinea Worm Contingency Fund through UNICEF, should be selected in collaboration with the national GWEP.
8. The UNICEF offices in Mali, Togo and Niger, in collaboration with the relevant departments of the governments in question, should do everything possible to ensure that the support provided by the Gates Guinea Worm Contingency Fund for provision of safe drinking water be implemented before the end of 2005.

9. The governments of the countries with endemic GWD, which have not yet allocated funds to their national GWEP, are requested to do so as of 2005, pursuant to the ‘Geneva Declaration on Dracunculiasis Eradication’.
10. The partners of the countries with endemic GWD should continue to support all GWEPs until the eradication of dracunculiasis has been certified.

**SPECIFIC RECOMMENDATIONS:**

**MAURITANIA**

Mauritania’s GWEP should:

1. reaffirm its commitment to stop the local spread of dracunculiasis in Mauritania in 2004;
2. implement a plan which ensures the immediate investigation and documentation of each case (suspected or real) of GWD; the results of these investigations should be shared, immediately, with partner organizations (WHO, UNICEF, The Carter Center / Global2000);
3. identify, at the regional or national level, a focal point (person), who can immediately confirm (reinvestigate), each new case of GWD (real or rumored case).

**BENIN**

The Benin GWEP should:

1. implement, in 2005, a national committee for the certification of the eradication of Guinea worm disease;
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## **BURKINA FASO**

The Ministry of Health, the WHO, and the other partners must ensure increased active epidemiological surveillance in areas free of GWD that are at risk.

## **MALI**

The Mali GWEP should:

1. train/re-train, on an annual basis, the Community Health Agents (CHA) [Agents de Santé Communautaires (ASC)] of those areas which are endemic;
- 2.

are up by +90% (785 vs 1,495). After increases in January – April, Volta Regions cases were down by -37%, -28% and -79% in May, June and July, respectively. In Nkwanta District (outbreak reported in February 2003), which is the most affected area of the Volta Region and the highest endemic district in the country, cases have been reduced by -44%, -30%, and -82% in May, June and July 2004. In Savelugu-Nanton District (outbreak reported in April 2003), which is the third highest endemic district in the country, cases have been reduced by -23% and -68% in June and July 2004. Reductions are not yet manifest in Tolon-Kumbungu District, where an outbreak was reported in June 2003. Kete Krachi District reported a decrease in cases of -83% in July. Overall, case containment has remained about the

4. The GWEP should pay special attention in low endemic areas and use appropriate forms (imported case forms, rumor registers, case investigation forms) to document and keep records on surveillance activities.

#### **MONITORING AND SUPERVISION**

5. Supervisors should use the standard check-list (including feedback) weekly to monitor all interventions put in place, and resolve all issues in the endemic village.

#### **INTERVENTIONS**

6. The Ministers of Health and Works and Housing should monitor the status of water supply provision in endemic villages monthly.
7. The GWEP should report monthly to Minister of Health on the status of provision of safe drinking in endemic villages
8. District Assemblies should encourage rural water programs to ensure regular and prompt maintenance of boreholes.
9. UNICEF/Partners should advise on alternative technologies for utilizing surface water in areas where drilling of boreholes is not feasible.
10. Sections of large endemic villages (5000+) that use pond water should be provided with filters.

#### **OWNERSHIP AND MANAGMENT**

11. District Directors of Health Services should participate in national and regional meetings on GWD.
12. Regional and District Health Medical Teams (RHMT and DHMTs) must play a central role in planning and implementation of GW activities. District GWEP teams should brief DHMTs on progress, needs, and plans each month.

#### **PARTNERSHIP AND COLLABORATION**

13. GGWEP should consider collaborating with other relevant sectors, such as Agricultural, Education, Local Government, (Environmental Health, District Assemblies), etc.
14. The Ghana Red Cross Society (GRCS) mother's clubs should be recognized as community volunteers and included in trainings, monthly meetings and other motivational activities.
15. Monthly meetings of the Intersectorial Coordinating Committee (ICC) should be held at regional and district levels to facilitate dialogue between water development partners and relieve communication discrepancies on water development issues.

## GHANA GUINEA WORM ERADICATION PROGRAM

### Status of Top 20 Endemic Districts in 2003

Cases Reported During January - July 2003 and 2004\*, Percent Change in Cases Reported

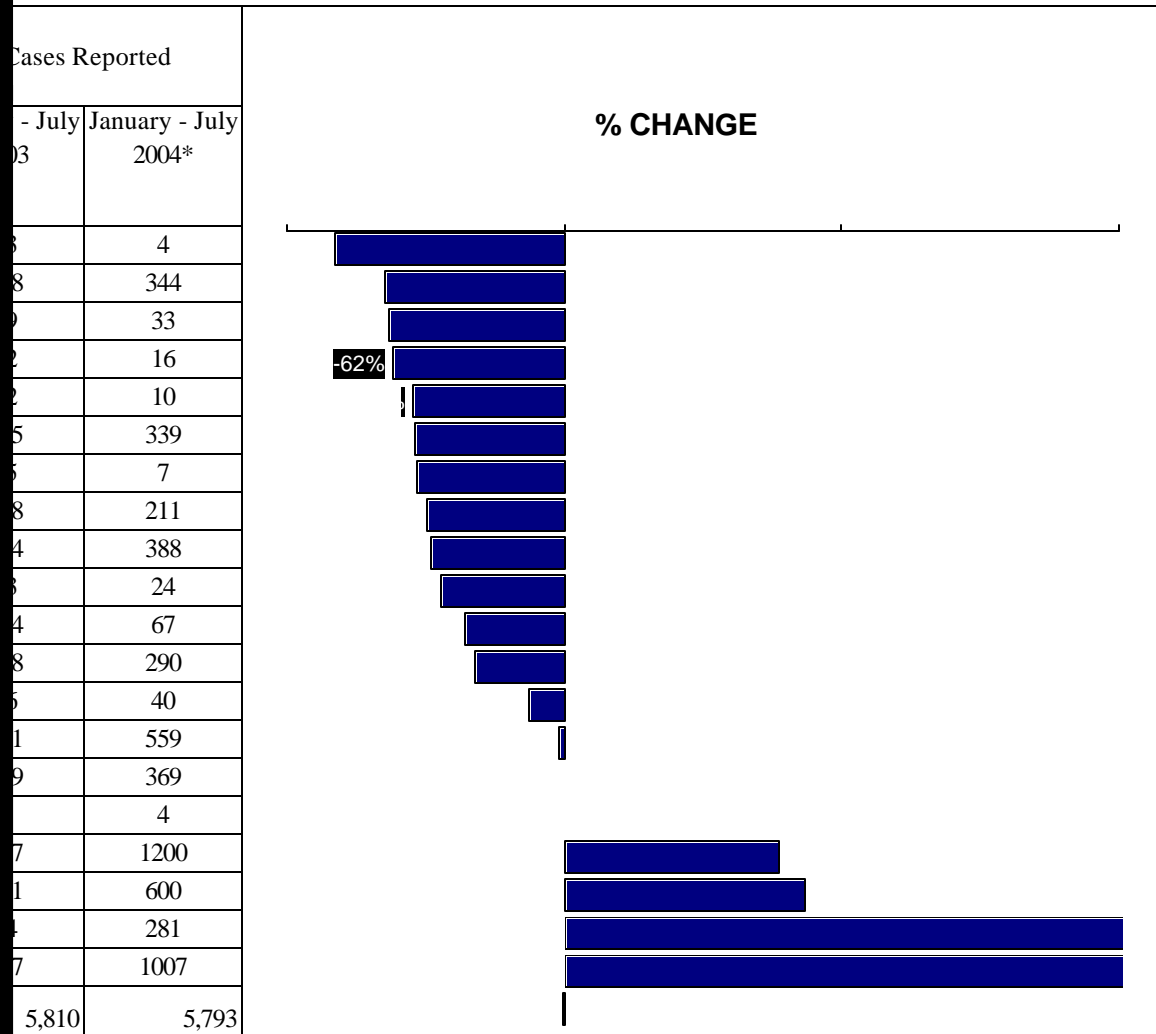




Table 2

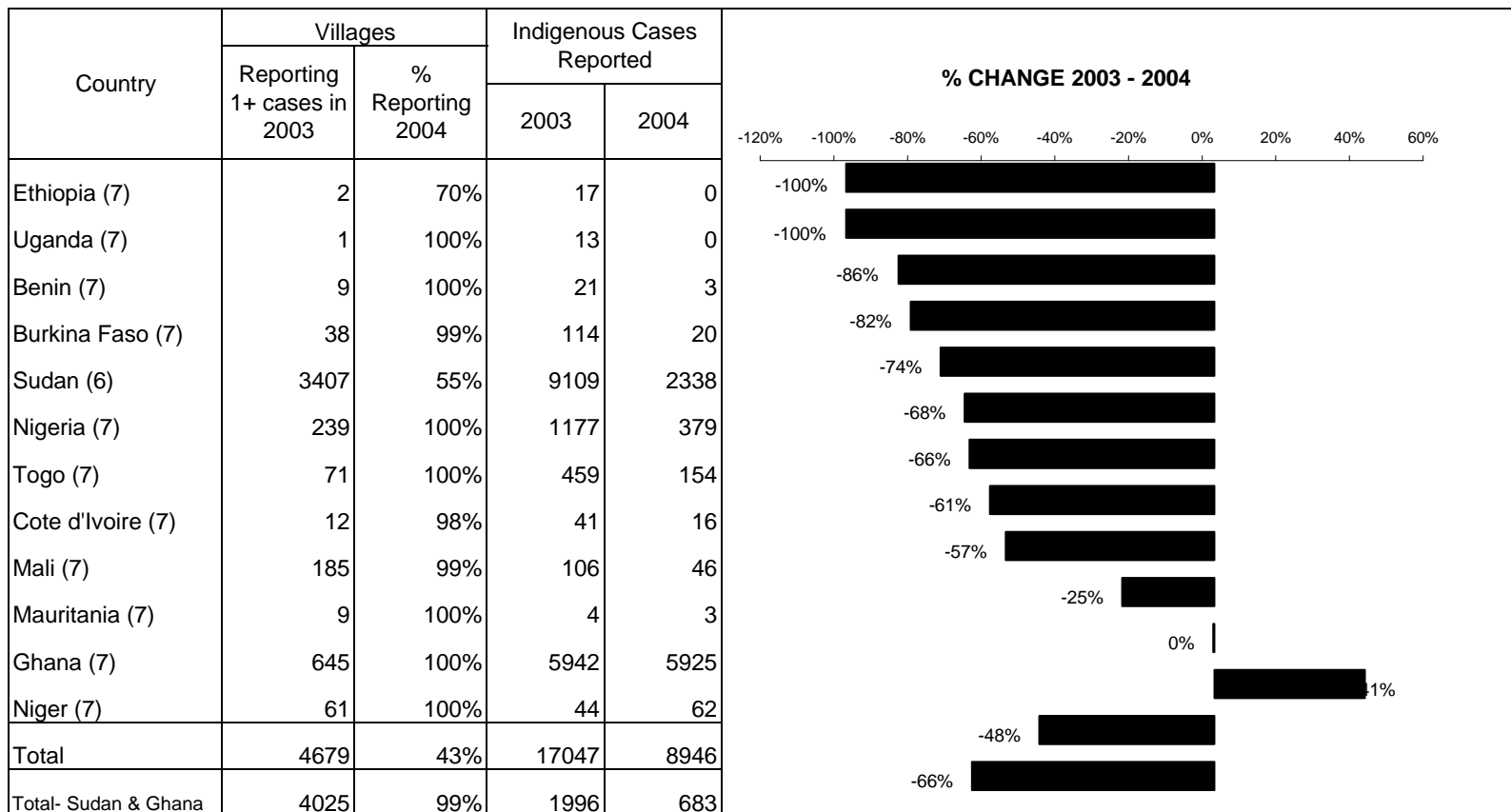
Number of cases contained and number reported by month during 2004\*  
 (Countries arranged in descending order of cases in 2003)

	NUMBER OF CASES CONTAINED / NUMBER OF CASES REPORTED												TOTAL*	CONT.	%
	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER			
SUDAN	33 / 193	46 / 220	31 / 163	52 / 415	124 / 779	131 / 568	/	/	/	/	/	/	417 / 2338	18	
GHANA	647 / 1214	668 / 1139	625 / 981	593 / 906	671 / 906	281 / 521	134 / 258	/	/	/	/	/	3619 / 5925	61	
NIGERIA	81 / 101	64 / 73	40 / 48	25 / 31	63 / 69	31 / 35	17 / 22	/	/	/	/	/	321 / 379	85	
MALI															



Figure 2

Number of Villages/Localities Reporting Cases of Dracunculiasis in 2003, Percentage of Endemic Villages Reporting in 2004\*, Number of Indigenous Cases Reported During the Specified Period in 2003 and 2004\*, and Percent Change in Cases Reported

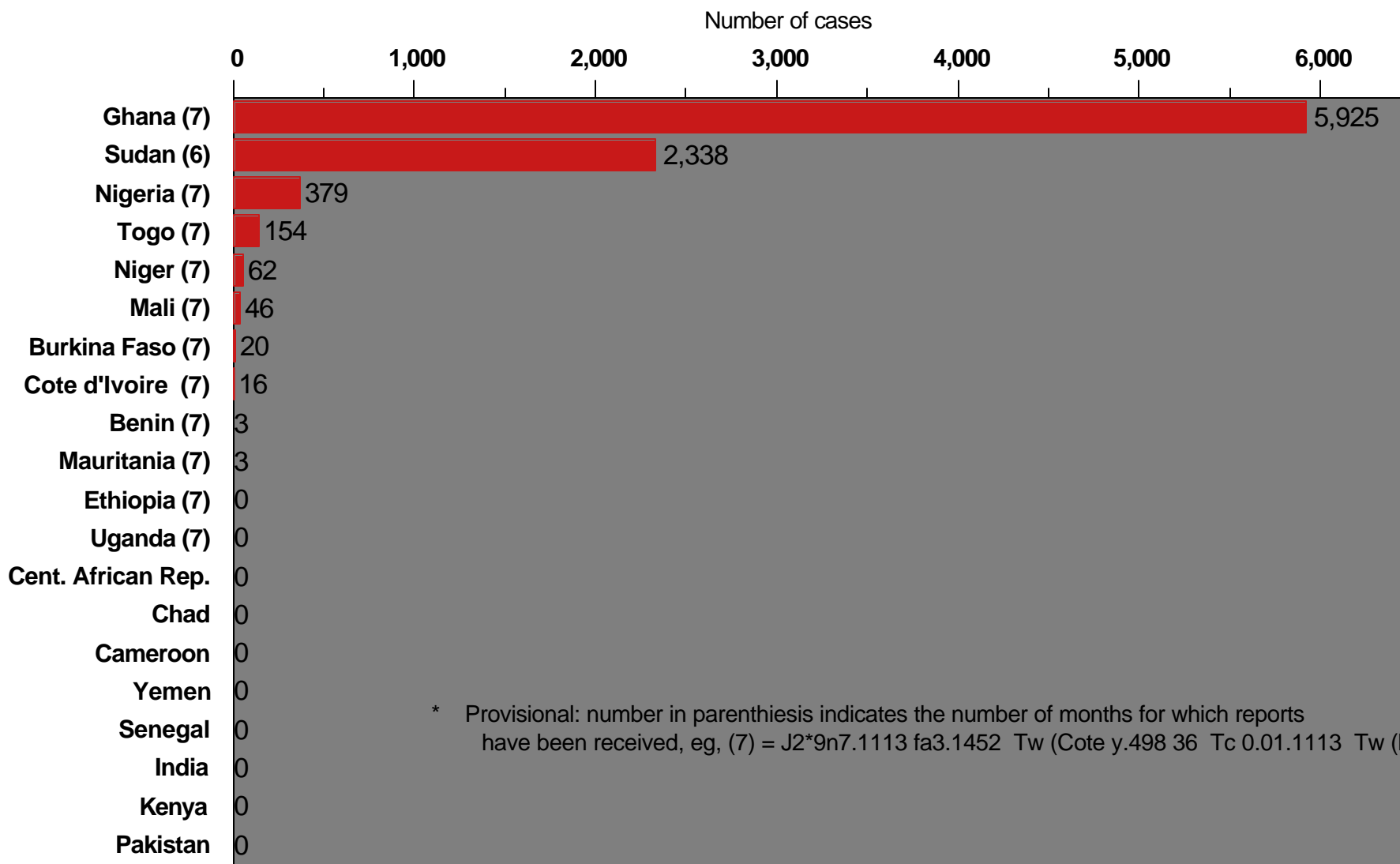


(7) Indicates month for which reports were received, e.g., Jan. - July 2004

\* Provisional



# Distribution by Country of 8,946 Indigenous Cases of Dracunculiasis Reported during 2004\*



**PROCEDURE SUGGESTED BY THE WORLD HEALTH ORGANISATION AND THE  
CARTER CENTER FOR ASSESSING THE EFFECT OF ABATE® LARVICIDE ON  
CYCLOPOID COPEPODS, THE INTERMEDIATE HOST OF GUINEA WORM**

**Background**

**Assessing the density of cyclopoid copepods before treatment with ABATE<sup>®</sup> Larvicide**

1. Only trained Guinea Worm Eradication Program (GWEP) personnel appointed to perform this activity should carry out this test. These personnel should be independent of those charged with treating sources of drinking water with ABATE<sup>®</sup> larvicide.
- 2.

## NO INDIGENOUS CASES OF DRACUNCULIASIS IN UGANDA DURING LAST 12 MONTHS



**Uganda** has now been 12 months without an indigenous case of dracunculiasis, and has officially entered the pre-certification stage of its program. CONGRATULATIONS, Uganda!!!

### IN BRIEF:

#### MR. ARYC MOSHER REPLACES MRS. NWANDO DIALLO AS THE CARTER CENTER RESIDENT TECHNICAL ADVISOR IN GHANA

On July 28, 2004 Mr. Aryc Mosher officially assumed responsibility as The Carter Center's Resident Technical Advisor (RTA) to Ghana's Guinea Worm Eradication Program. Welcome, Aryc! Mrs. Nwando Diallo served as RTA from July 2002- August 2004 and assisted the GWEP to implement and intensify a broad range of interventions against Guinea worm disease in Ghana. She collaborated closely and effectively with all of Ghana's GWEP partners and was an excellent steward of program assets and resources. Thank you Nwando!

#### KINGDOM OF SAUDI ARABIA DONATION



The Carter Center has received a pledge of \$1 million over five years from The Kingdom of Saudi Arabia for support of the campaign to eradicate Guinea worm disease. This contribution will be used to support the Center's efforts to make the final push to eradicate Guinea worm disease in the remaining endemic countries. The Kingdom of Saudi Arabia has been a committed partner of The Carter Center since 1984, contributing \$1.5 million to the construction of the Center. Since then, the Kingdom of Saudi Arabia has provided nearly \$8 million to make Guinea worm eradication a reality.

#### **The schedule for Program Reviews is as follows:**

Sudan: October 5-6 in Nairobi

Nigeria: October 11-12 in Jos

Ethiopia and Uganda: November 16-18 in Kampala

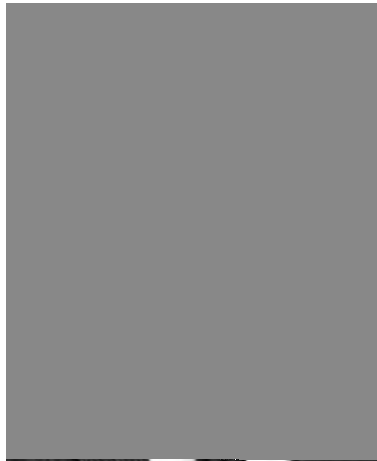
#### **RECENT PUBLICATIONS**

World Health Organization. 2004. Dracunculiasis eradication. Weekly Epidemiological Record. 79(25):234-235.

Cook GC. 2004. Discovery and clinical importance of the filariases. Infectious Disease Clinics of North America. 18(2):219-30.

Greenaway C. 2004 Dracunculiasis (Guinea worm disease). Canadian Medical Association Journal. Vol. 170(4)(pp 495-500.

Molyneux DH. Hopkins DR. Zagaria N. 2004. Disease eradication, elimination and control: The need for accurate and consistent usage. Trends in Parasitology. Vol. 20(8)(pp 347-351).



ANDY AGLE (1937-2004)

The world of Guinea worm eradication lost one of its most important warriors with the unfortunate passing of Mr. Andrew Nils Agle in his sleep in Lagos, Nigeria on August 13, 2004. We deeply regret having to share this news. Andy had a stellar career in international health as a public health advisor at CDC, including work in the Smallpox Eradication Programs of Togo, Dahomey (Benin), Afghanistan, and Bangladesh before he served as Director of Operations for Global 2000 at The Carter Center for nineams of hdg0,rs

*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. James H. Maguire, Director, 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 <http://www.cdc.gov/ncidod/dpd/parasites/guineaworm/default.htm>.*



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