Date: April 12, 2004

From: WHO Collaborating Center for

Research, Training and Eradication of Dracunculiasis

Subject: GUINEA WORM WRAP-UP #142

To: Addressees

#### PRESIDENT TOURE OPENS PROGRAM COORDINATORS MEETING IN BAMAKO

<u>President Amadou Toumani Toure</u> of Mali opened the Ninth Meeting of National Program Coordinators of Dracunculiasis Eradication Programs, which met at *the Palais des Congres* in Bamako, Mali from March 29 to April 1, 2004. President Toure, a vigorous champion of Guinea worm eradication since 1992, stated that despite his many duties and obligations as head of state, he was at the Opening Ceremony "out of personal conviction", having "never left this subject". Mali's Minister of Social Affairs, <u>Mdme Keita Rokiatou N'Diaye</u>, and representatives of WHO, UNICEF, and The Carter Center also addressed the Opening Ceremony.

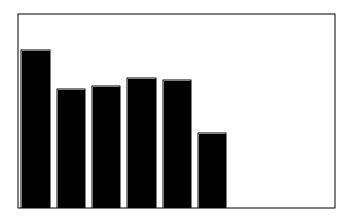
Reports presented at this meeting confirmed that most countries advanced substantially toward eradication of dracunculiasis in 2003. Overall, cases were reduced by –41%, to less than 33,000. Sudan and Ghana accounted for 63% and 26% of the cases, respectively. Less than 1,300 endemic villages remain outside of Sudan. The Central African Republic reported that it had found no cases in that country since January 2002. Cameroon, Central African Republic, Chad and Kenya are now in the pre-certification stage, while Democratic Republic of Congo, Liberia, and Sierra Leone are in the verification phase, according to WHO. This was the first international meeting on dracunculiasis attended by the new national program coordinators from Cote d'Ivoire (Dr. Brou Aka Noel) and Ethiopia (Dr. Daddi Jima).

The review discussed the problem of surveillance in no longer endemic areas at length (see page 11

Government of Ghana has begun drilling 180 borehole wells in endemic villages, and recently allocated the equivalent of over \$111,000 for program activities in 2004.

**Nigeria** reported 1,459 cases (74% cpntained) from 280 villages in 2003, a -62% reduction from the 3,820 cases reported in 2002. Of the country's 774 Local Government Areas (LGAs), only 56 reported cases in 2003. Five of those LGAs reported 61% of all cases in 2003.

Figure 1 Figure 2



Mali reported 829 cases cases (54% contained) from 188 villages in 2003, a reduction of only –4% from the 861 cases reported in 2002. Three districts (Gao, Ansongo, Gourma Rharous) reported 92% of all cases. Recent studies are ascertaining the precise sites where transmission is occurring among the nomadic, mainly black Tuareg populations of these three districts and adjoining endemic areas of Niger and Burkina Faso (map). The Mali program's objectives for 2004 are summarized on page 15. The Government of Mali has recently announced it will allocate the equivalent of \$154,000 for program activities in 2004.

**Togo** reported 669 cases (74% contained) from 158 villages in 2003, a reduction of –58% from the 1,502 cases reported in 2002. Forty-seven of the cases were imported from Ghana, including 22 cases from Nkwanta District.

**Niger** reported 293 cases (49% contained) in 78 localities in 2003, which was an increase of 20% over the 248 cases reported in 2002. Eighty-nine percent of all cases occurred in three districts of Tillaberi Region, whose nomadic population adjoins those of Mali and Burkina Faso (map). Black Tuaregs accounted for 72% of cases. The program plans to establish its first 6 containment centers in 2004.

**Burkina Faso** reported 203 cases (59% contained) in 69 villages in 2003, a –66% reduction from the 591 cases reported in 2002. The 203 cases in 2003 included 28 cases imported from Mali, Ghana, Niger and Cote d'Ivoire. Seventy-four percent of cases were reported from only 3 districts, including 2 adjoining the remaining endemic areas of Niger and Mali (map). For the first time since the program began, Burkina Faso's GWEP recorded zero indigenous cases in January 2004 and again in February. The Government of Burkina Faso has allocated the equivalent of \$137,000 for program activities in 2004.

**Cote d'Ivoire** reported 42 cases (48% contained) in 12 villages in 2003, a reduction of -78% from the 208 cases reported in 2002. Under new leadership, this program has conducted investigations into the status of suspected cases on the rebel-held side of the political conflict, without finding any confirmed cases there, and held a Guinea Worm Week in the endemic districts of Tanda and Boudoukou.

**Benin** reported 30 cases (100% contained) in 13 villages in 2003, a reduction of -83% from the 181 cases reported from 36 villages in 2002. The 30 cases included 4 imported cases, and 25 of the cases were reported from Savalou District. All 30 cases were reportedly detected within 24 hours and contained. This program recorded eight consecutive months (February through September) with zero indigenous cases in 2003.

**Uganda** reported 13 indigenous cases, all from one village, in 2003, which is an increase of 117% from the 6 indigenous cases in 2002. It also reported 13 cases imported from Sudan in 2003. The one endemic village remaining was fully covered with safe water for the first time, nylon filters for household use, health education, and ABATE® larviciding in 2003. Of the 26 cases reported, 19 (73%) were reportedly detected within 24 hours and contained. Insecurity and imported cases from Sudan remain the most important challenges to this program.

**Ethiopia** reported 13 indigenous cases from 2 villages, all in Gambella Region. This is a reduction of –46% from the 24 indigenous cases reported in 2002. Another 15 cases were imported from Sudan. Of the 28 cases, all but one were reportedly detected within 24 hours and contained. Insecurity in Gambella Region is a major impediment to this program.



Table 2

Number of cases contained and number reported by month during 2004\*

(Countries arranged in descending order of cases in 2003)

| COUNTRIES<br>REPORTING<br>CASES | NUMBER OF CASES CONTAINED / NUMBER OF CASES REPORTED |                  |               |       |       |       |       |        |           |         |          | %        |          |       |
|---------------------------------|------------------------------------------------------|------------------|---------------|-------|-------|-------|-------|--------|-----------|---------|----------|----------|----------|-------|
|                                 | JANUARY                                              | FEBRUARY         | MARCH         | APRIL | MAY   | JUNE  | JULY  | AUGUST | SEPTEMBER | OCTOBER | NOVEMBER | DECEMBER | TOTAL*   | CONT. |
| SUDAN                           | 33<br>/<br>121                                       | 41 / 117         | /             | /     | /     | /     | /     | /      | /         | /       | /        | /        | 74 / 238 |       |
| GHANA                           | 480<br>/<br>1211                                     | 550<br>/<br>1130 | 528<br>/ 976  | /     | /     | /     | /     | /      | /         | /       | /        | /        | 1558     | 47    |
| NIGERIA                         | 81<br>/<br>101                                       | 64 / 73          | 40 / 48       | /     | /     | /     | /     | /      | /         | /       | /        | /        | 185      | 83    |
| MALI                            | 1<br>/<br>1                                          | 0 / 1            | 0 / 1         | /     | /     | /     | /     | /      | /         | /       | /        | /        | 1 / 3    | 33    |
| TOGO                            | 35<br>/<br>46                                        | 20 / 29          | 18<br>/<br>46 | /     | /     | /     | /     | /      | /         | /       | /        | /        | 73 / 121 | 60    |
| NIGER                           |                                                      | 2 / 2            | 1<br>/<br>1   | /     | /     | /     | /     | /      | /         | /       | /        | /        | 4 / 4    | 100   |
| BURKINA FASO                    |                                                      |                  |               | /     | /     | /     | /     | /      | /         | /       | /        | /        | 2 / 3    | 67    |
| COTE D'IVOIRE                   | 2 / 2                                                | 3 / 6            | 0 / 4         | /     | /     | /     | /     | /      | /         | /       | /        | /        | 5 / 12   | 42    |
| BENIN                           |                                                      | 2 / 2            | 1 / 1         | /     | /     | /     | /     | /      | /         | /       | /        | /        | 3 / 3    | 100   |
| ETHIOPIA                        |                                                      | 1 / 1            | 0 / 0         | /     | /     | /     | /     | /      | /         | /       | /        | /        | 1 / 1    | 100   |
| UGANDA                          |                                                      |                  |               | /     | /     | /     | /     | /      | /         | /       | /        | /        | 0 / 0    | 0     |
| MAURITANIA                      | 1 / 1                                                |                  |               | /     | /     | /     | /     | /      | /         | /       | /        | /        | 1 / 1    | 100   |
| TOTAL*                          | 635<br>/<br>1485                                     | 684              | 588           | 0 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 0 / 0  | 0 / 0     | 0 / 0   | 0 / 0    | 0 / 0    | 1907     | 49    |
| % CONTAINED                     | 43                                                   | 50               | 55            |       |       |       |       |        |           |         |          |          | 49       |       |

<sup>\*</sup> 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 Villages/Localities Reporting Cases of Dracunculiasis in 2002, Percentage of Endemic Villages Reporting in 2003, Number of Indigenous Cases Reported During the Specified Period in 2002 and 2003, and Percent Change in Cases Reported

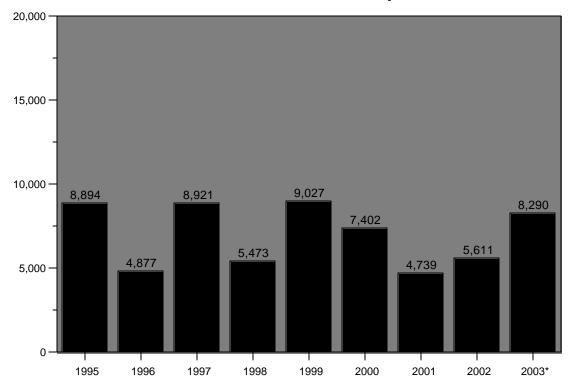
|                    | Villa                            | ges            | Indigenous Cases |       |       |      |            |             |          |      |  |  |
|--------------------|----------------------------------|----------------|------------------|-------|-------|------|------------|-------------|----------|------|--|--|
| Country            | Reporting<br>1+ cases in<br>2002 | %              | Repo             | orted |       | 9    | % CHANGE 2 | 2002 - 2003 | 2 - 2003 |      |  |  |
|                    |                                  | Reporting 2003 | 2002             | 2003  | -100% | -50% | 0%         | 50%         | 100%     | 150% |  |  |
| Benin (12)         | 31                               | 100%           | 135              | 26    | -81%  |      |            |             |          |      |  |  |
| Cote d'Ivoire (12) | 25                               | 100%           | 192              | 42    | -78%  |      |            |             |          |      |  |  |
| Mauritania (12)    | 18                               | 100%           | 42               | 13    | -69%  |      |            |             |          |      |  |  |
| Burkina Faso (12)  | 133                              | 98%            | 580              | 175   | -70%  |      |            |             |          |      |  |  |
| Nigeria (12)       | 557                              | 100%           | 3820             | 1459  | -62   | 2%   |            |             |          |      |  |  |
| Togo (12)          | 228                              | 100%           | 1473             | 622   | -5    | 58%  |            |             |          |      |  |  |
| Sudan (12)         | 4233                             | 65%            | 41493            | 20299 |       | -51% |            |             |          |      |  |  |
| Ethiopia (12)      | 12                               | 100%           | 24               | 13    |       | -46% |            |             |          |      |  |  |
| Mali (12)          | 183                              | 88%            | 858              | 824   |       |      | -4%        | ı           |          |      |  |  |
| Niger (12)         | 77                               | 100%           | 233              | 279   |       |      |            | 20%         |          |      |  |  |
| Ghana (12)         | 739                              | 100%           | 5606             | 8285  |       |      |            | 48%         |          |      |  |  |
| Uganda (12)        | 19                               | 100%           | 6                | 13    |       |      |            |             |          | 117% |  |  |
| Total              | 6255                             | 74%            | 54462            | 32050 |       | -41% |            |             |          |      |  |  |
| Total- Sudan       | 2022                             | 99%            | 12969            | 11751 |       |      | -9%        |             |          |      |  |  |

(12) Indicates month for which reports were received, e.g., Jan. - Dec. 2003

Figure 5

| Burkina Faso (3)  | 38  | 96%  | 5   | 0   |
|-------------------|-----|------|-----|-----|
| Ethiopia (3)      | 2   | 100% | 3   | 0   |
| Benin (3)         | 9   | 100% | 21  | 3   |
| Nigeria (3)       | 239 | 100% | 939 | 222 |
| Cote d'Ivoire (2) | 12  | 100% | 29  | 7   |
| Mali (2)          | 185 | ??   | 7   | 2   |

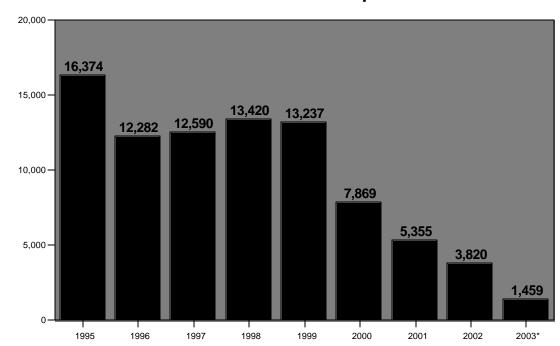
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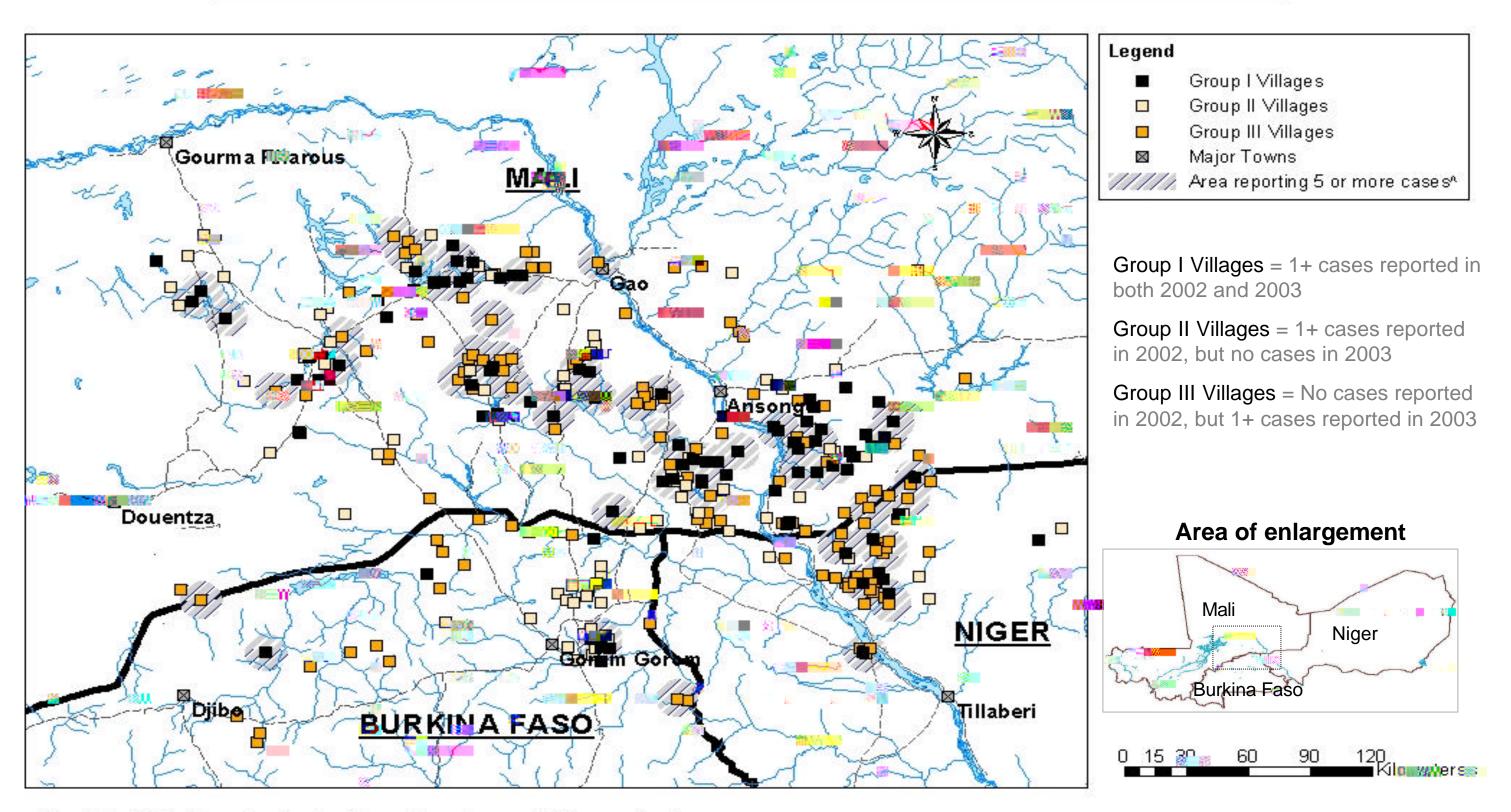
NUMBER OF CASES

Number of cases

## Nigeria Guinea Worm Eradication Program Number of Cases of Dracunculiasis Reported: 1995 -2003



# Partial distribution of endemis localities in Mali, Burkina Faso, and Niger January — December 2003



<sup>\*</sup> partial distribution of endemic villages based on available or distribution of endemic villages based on available or distribution of endemic villages.

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#### **FUNDING**

The Government of Japan, through its Grassroots Grants Assistance Program, in March awarded another \$80,000 to The Carter Center to help support the provision of filter material for Sudan's Guinea Worm Eradication Program. As reported in the previous issue, Japan has now contributed more than \$1 million to The Carter Center through the grassroots grants mechanism. This is the fifth such grant provided to The Carter Center office in Khartoum by the Embassy of Japan for Sudan's GWEP, following previous grants totaling over \$475,000 in 1999, 2001, 2002, and 2003.

### SPECIAL SESSION ON SURVEILLANCE: 9TH MEETING OF NATIONAL COORDINATORS OF GUINEA WORM ERADICATION PROGRAMS, MARCH 29—APRIL 1, 2004, BAMAKO MALI

**Topic I. Surveillance in formerly endemic areas.** Since 1986 the international Dracunculiasis Eradication Program (DEP) has reduced the annual incidence of the disease from an estimated 3.5 million cases, to 32,152 cases detected during 2003, a reduction of 99%.

The number of endemic villages has been reduced by 80%, from 23,735 endemic villages in 1991 to 4,660 in 2003. In Africa, there are now an estimated 18,500 villages where transmission of dracunculiasis no longer occurs. Surveillance for cases of dracunculiasis in these disease-free areas (at-risk villages) is weak or non-existent, and makes the Guinea Worm Eradication Programs (GWEPs) vulnerable to annual unexpected outbreaks of the disease. Althr matel 75 received with a feet of the 3.2467 of 6 Tc 0. Tmber of endemic fu 41.a, f endemic fu 41.a, f endemic fu 41.a feet of the 3.2467 of 1 Tc 0. Tmber of endemic fu 41.a, f endemic fu 41.a, f endemic fu 41.a.

immunization days to search for cases of GWD), reports about cases of GWD from school children attending the school system, or from other workers such as community-based drug distributors, and from cash reward systems for reporting of cases of GWD.

- 1. Include reporting of cases of GWD in the country's IDSR system. Currently, IDSRs are facility (health post) based, but need to be expanded to villages, at least in the most highly at-risk group of formerly endemic villages.
- 2. How to evaluate?
  - Number of alleged cases of GWD in rumor register
  - Information from reward system for reporting of dracunculiasis cases
  - Number of dracunculiasis outbreaks detected
  - Timeliness of detection of outbreaks.

### Topic II. Improving Surveillance for cases of dracunculiasis in nomadic areas in Mali (Gao, Ansongo, and Gourma Rharous Cercles) Niger (Tillaberi and Tera Districts), and Burkina Faso (Gorom-Gorom, and Djibo Districts).

WHO and Carter Center staff described efforts to assist Mali, Niger, and Burkina Faso to define the location (latitude and longitude) of nomadic camps, determine the seasonal flow of movements by nomadic populations, determine the location of nomadic camps, of sources of drinking water, of fonio fields, and of seasonal and perennial streams and impoundments. Coordinates were obtained from 927 villages visited in the above-mentioned endemic districts in the three countries, and data on all above parameters collected. A total of 254 localities (including 30 new ones) were determined to have endemic GWD.

A series of maps (based on data collected by all three countries) was presented. These maps identify localities that reported cases of GWD in 2002 and/or 2003. The localities shown on the maps represent 240 (72%) of the localities

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- All national coordinators are to liaise with their ministries of health to urge that the reporting of cases of dracunculiasis be included in the national IDSR system.
- All endemic countries are encouraged to engage and utilize now, idle village-based health workers trained by the GWEP, in other health programs.

#### NINTH MEETING OF NATIONAL COORDINATORS OF GUINEA WORM ERADICATION PROGRAMS

### **GENERAL RECOMMENDATIONS**

1. The level of implementation of the recommendations and of the expected results from this meeting should be

### SUDAN GUINEA WORM ERADICATION PROGRAM GENERAL OBJECTIVES FOR CALENDAR YEAR 2004 Government of Sudan and OLS/South Sudan

- 1. Cases will be contained, according to the international definition for case containment as confirmed by full-time active surveillance utilizing in-place village resources, at the following levels:
  - GOS contain 80% of all reported cases (53% in 2003).
  - OLS contain 20% of all reported cases (1% in 2003).
- 2. Attain 100% coverage of household filters in all endemic villages (51% for GOS, 67% for OLS in 2003).
- 3. Conduct house-to-house training in the use and care of household filters in 90% of GOS-served endemic villages (0% in 2003).
- 4. Conduct bi-weekly supervision of village volunteers in GOS-served areas of the five most endemic states (0% in 2003).
- 5. Provide pipe filters, and education on their use and care:
  - GOS 500,000 herders and farmers in the five most endemic states (39% in 2003).
  - OLS 100,000 military forces and 200,000 herders.
- 6. Monitor monthly the functioning of all existing hand pumps in endemic villages of GOS-served areas (0% in 2003).
- 7. Advocate for the provision of new and rehabilitated handpumps.
  - GOS 150 new and 1,000 rehabilitated in the five most endemic states (35% and 60% respectively in 2003).
  - OLS 772 new, 500 rehabilitated in focus areas of return.
- 8. Conduct monthly spot checks for copepods in Abate-treated ponds in 20 endemic villages in GOS-served areas of three endemic states.
- 9. Conduct a KAP study of local Nuer populations in the GOS-served areas of the Upper Nile zone.
- 10. Conduct Guinea worm days in five of the most endemic villages of the GOS-served areas. (60% in 2003).
- 11. Conduct a National Guinea Worm Day led by President Bashir, Dr. Garang and President Carter within 3 months of the signing of the peace agreement between the Government of Sudan and the SPLM (new objective).
- 12. Ensure the broadcast, twice weekly, of radio messages in local languages in the five most endemic states (40% in 2003).
- 13. Conduct health education sessions for 350,000 internally displaced persons in targeted displacement camps of the GOS-served areas (100% in 2003).
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Distribute 104,000 filters (all types) to all endemic villages.

- 6. Apply ABATE larvicide on a timely basis to 50% of endemic localities [now 22%] When applicable, treat water sources in the 20 most endemic villages.
- 7. Provide rewards to all cases that are correctly contained within 24hrs [now 9%].
- 8. Increase number of endemic localities with at least one safe water source [now 11%] Construct 20 new wells in the 20 most endemic villages.
- 9. Increase the number of female Village Volunteers trained [now ???].
- 10. Recruit and train additional Village Volunteers to ensure at least two per endemic locality [now??].
- 11. Recruit and train 450 AVG, 35 ASZ, 50 ICPM/TS/TDC/ 10 Medecins.
- 12. Conduct two Guinea Worm Weeks (April and May) in the 10 most endemic localities in each Circle (G. Rharous, Gao, Ansongo, Bourem) [now May 2003].
- 13. Cross-notify 100% of imported cases of GWD upon receiving information at the district and national level [now 100%].
- 14. Broadcast health education messages by radio 4x/month during peak transmission season [now not regular].
- 15. Conduct health education sessions in local markets 4x/month from April to December [now not regular].
- 16. Open a Case Containment Center in Gossi, G. Rharous [now 0] Organize awareness campaigns to promote the center before June.

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 <a href="http://www.cdc.gov/ncidod/dpd/parasites/guineaworm/default.htm">http://www.cdc.gov/ncidod/dpd/parasites/guineaworm/default.htm</a>.

