



Date: April 25, 2003



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

Subject: GUINEA WORM WRAP-UP #132

To: Addressees

Detect Every Case, Contain Every Worm!

8TH MEETING OF NATIONAL COORDINATORS HELD IN KAMPALA

The 8th Meeting of National Coordinators of Dracunculiasis Eradication Programs was convened in Kampala, Uganda on April 1-4, 2003. The meeting was declared open by a representative of the Ugandan Head of State, President Yoweri Museveni. Other participants in the Opening Ceremony included former Nigerian Head of State General (Dr) Yakubu Gowon, Uganda 's Minister of Health, Brigadier Ben Nwobueze, members of the Ugandan parliament, the WHO and UNICEF representatives in Uganda, and a representative of The Carter Center, in addition to the national program coordinators of the remaining dracunculiasis endemic countries. Representatives of the endemic countries presented their final data for 2002, which is detailed in the accompanying tables and graphs. Some other notable aspects of the country reports are summarized below, as well as some data reported since the meeting in Kampala.

Over the past year; the global program realized modest reductions in reported cases (-14% overall; from 63,717 cases in 2001 to 54,638 in 2002), and in the numbers of villages outside of Sudan that reported one or more cases (-13%, from 2,320 in 2001 to 2,022 in 2002). The reported rates of case containment were still too low in some endemic countries (Table 2). And as shown in Table 5, countries' effectiveness in reducing disease in known endemic villages ranged from a reduction of -93% in 14 Ugandan villages, to only -5% in 783 Ghanaian villages, with Sudan reporting a notable reduction of -53% in 3,613 of its villages. The most encouraging data from 2002, however, are given in Table 1: of the 1,937 villages outside of Sudan that reported one or more cases of dracunculiasis during 2002, only 573 (30%) of them reported five or more cases each; and those 573 villages reported fully 80% of all cases outside of Sudan! **Those 573 villages should be the main focus of attention in endemic countries outside of Sudan this year.**

Table 1 Number of Villages/Localities Reporting 1+ and 5+ Cases, and the Number of Cases Reported From Those Villages/Localities during 2002 by Country (excluding Sudan)

| Country | Number of Villages/Localities Reporting | | Number of Cases from Villages/Localities Reporting | | % of Cases Reported from Villages/Localities Reporting 5+ Cases |
|---------------|---|----------|--|----------|---|
| | 1+ Cases | 5+ Cases | 1+ Cases | 5+ Cases | |
| Ghana | 739 | 221 | 5,606 | 4,595 | 82% |
| Nigeria | 557 | 169 | 3,820 | 3,089 | 81% |
| Togo | 228 | 57 | 1,472 | 1,200 | 82% |
| Mali | 183 | 68 | 858 | 646 | 75% |
| Burkina Faso | 133 | 30 | 582 | 435 | 75% |
| Niger | 77 | 14 | 233 | 130 | 56% |
| Cote d'Ivoire | 25 | 4 | 192 | 170 | 89% |
| Benin | 31 | 7 | 157 | 145 | 92% |
| Mauritania | 18 | 3 | 42 | 22 | 52% |
| Ethiopia | 12 | 0 | 24 | 0 | 0% |
| Uganda | 19 | 0 | 6 | 0 | 0% |
| Total | 2022 | 573 | 12,992 | 10,432 | 80% |

In addition to the need to focus on improving interventions in endemic villages reporting five or more cases, two other major priorities are apparent from the reports at this year's meeting: the need to improve surveillance for dracunculiasis in formerly endemic areas (6 of Ghana's 10 regions and 6 of Mali's 8 regions are essentially dracunculiasis-free already, for example) and the need to improve cross-notification of internationally exported cases (use e-mail!).

SUDAN accounted for 76% of all cases reported worldwide in 2002. Despite the civil war; the program and its partners on both sides accessed more endemic villages than ever (6,365) in 2002, improved its reporting rate from 66% of accessible villages in 2001 to 70%, distributed more cloth filters for household use (974,543; with full coverage in 64% of endemic villages), and held more health education sessions (112,588; 92% coverage) in endemic villages than ever before during 2002. Of the 90 cases reported in the northern states of Sudan, 30 were imported from the southern states, which also exported a total of 58 cases to neighboring countries during 2002 (Table 3). 69 of the cases in the northern states were reportedly contained, including 22 in case containment centers. Surveys are underway or recently completed in the Nuba Mountains, Upper Nile State and Blue Nile State, parts of which were previously inaccessible to the program because of the war.

GHANA has completed a rapid investigation of the outbreak in Nkwanta District of Volta Region, where 532 cases were confirmed in 80 communities for January-March 2003. Most (422) of the cases occurred in the two northern-most (Damako and Kpassa) of the district's five sub-districts. Aggressive actions being taken in Nkwanta in follow up include a US Peace Corps-assisted "Worm Week" held March 22-28 in which 27 volunteers worked in 13 of the highest endemic communities (with 71% of the cases), using flip charts, posters and comic books to deliver health education messages to 44,816 persons, and distributing 5,602 filters. Over 3,000 persons saw health education videos in local languages in six of the villages. Among the highest endemic districts in the Northern Region, Tamale District improved its coverage for filters, Abate, health education and water supply during 2002, while 63 (94%) of the 67 patients admitted to its case containment center in February 2003 were admitted in the pre-emergent stage or within 24 hours of emergence of their worms. In West Gonja, reported rates of case containment improved from 34% in 2001 to 70% in 2002. In Zabzugu-Tatale, filter coverage rose from 85% to 90% while Nanumba increased the proportion of endemic villages with at least one safe source of drinking water from 25% to 50%.

NIGERIA now has 19 of its 36 states and the Federal Capital Territory dracunculiasis-free, and only 82 of the country's 774 Local Government Areas (LGA) reported cases in 2002 (Yobe and Kano States became Guinea worm-free in 2002). Only 20 (24%) of these 82 LGAs reported 2,678 (70%) of the 3,825 cases reported during 2002. The proportion of endemic villages with filters in all households increased from 88% in 2001 to 98% in 2002, while the percentage of endemic villages with at least one source of safe drinking water rose from 49% to 60%. General Yakubu Gowon made advocacy visits to ten endemic states between February 2002 and February 2003. In February - March 2003 Global 2000 funded the repair of water sources in the country's highest endemic village (156 cases reported in 2002: Ado Awaye in Iseyin LGA, Oyo State), at a cost of about \$1,300. This included restoration of water to the Primary Health Care hospital that is also serving as the case containment center in the community since December 2002. One of the repaired boreholes had been dormant for 20 years. Of the 370 cases reported in Nigeria in February and March 2003, 156 (42%) were contained in a case containment center. "Worm Weeks" were conducted in Ado and Obi LGAs of Benue State and in Iyesin and Ibarapa North LGAs of Oyo State for the first time in January 2003, and in Ezza North LGA, Ebonyi State for the first time in March 2003. *Nigeria passed Ghana in Guinea Worm Race 2002.*

TOGO reports continued reductions in cases for the sixth straight month. Between October 2002 and March 2003, Togo reported 795 cases, compared to 1,112 cases reported during the same peak transmission period of 2001-2002, a reduction of 29%. In Haho District, which reported 43% of all cases in Togo in 2003, 30 of the 39 "new" villages that reported one or more cases in 2002 presented imported cases only (7 of these villages, the only ones among them to report 5 or more cases, reported 111 of the 170 cases in all 39 villages). Haho increased the reported rate of case containment among its highest endemic villages from 63% (271/429) in 2002 to 83% (59/71) in January-March 2003. For the country as a whole, 383 (25%) of the 1,502 cases reported in 2002 were contained in a case containment center. Analysis of results from the 8 villages where case containment centers were operational for 3-5 months in 2001, show that the rates of reduction in cases in the catchment areas of those centers for the same period of 2002 averaged -74%, from 818 cases (of which 418 were contained in a containment center and 509 were contained overall), to 213 cases.

MALI is preparing to conduct "Worm Weeks" in the three highest endemic districts of Gao, Ansongo and Gourma Rharous for the first time on May 9-15, 2003. US Peace Corps Volunteers will assist, having experienced a Worm Week in Burkina Faso in April this year. Health education messages are being taped on cassettes for broadcasting, and a physician is being recruited to help work on Guinea worm disease in Ansongo District, with the support of Global 2000/The Carter Center. A joint epidemiological and Focus Group Discussion mission to fraction chiefs among the Tamasheck-speaking population at risk has been delayed until May. Of the 7 sporadic cases reported in January-February 2003, all were detected within 24 hours of emergence of the worm, all were investigated by a supervisor, and all were contained.

BURKINA FASO, which is aiming to stop transmission in 2003, improved its filter and health education coverage from 68% to 90%, and from 82% to 99%, respectively, between 2001 and 2002. It contained 72% of 591 cases it reported (including 9 imported cases), had at least one safe water source in 79%, and used Abate in 64% of endemic villages in 2002. During the first quarter of 2003, it has reported only 12 cases (9 contained). "Worm Weeks" are being held in nine of the highest endemic districts between March and early June, with the help of six US Peace Corps Volunteers. Djibo and Gorom Gorom Districts, which are part of the tri-border problem area shared with Mali and Niger, are included (Djibo's Worm Week was in April). President Blaise Compaore has personally instructed the ministries of security and health to assist the program in that border area. The program will broadcast health education messages nationally and locally in four languages for five months of the peak transmission season beginning in May. Three case containment centers have been established, including one in the country's highest endemic village (Sorokina, in Gaoua District), and a total of eight are planned this year for 4 of the top 5 endemic districts. *Burkina Faso passed Mali in Guinea Worm Race 2002.*

NIGER reduced its cases by -65% in 2002, when only 77 villages/localities reported cases, and half (38) of those villages/localities reported only one case each. Tera and Tillaberi Districts, which reported 162 (65%) of Niger's 248 cases last year, are Niger's part of the tri-border problem area shared with Mali and Burkina Paso. Case containment rates were especially low (44%, 58%) in those two districts in 2002. The program will conduct "Worm Weeks" in Tillaberi May 9-15 and in Tera May 21-26, with assistance from a US Peace Corps Volunteer and a Japanese Volunteer (JOCV). This will be Tillaberi's first Worm Week. The program will extend the reward system to cover the whole country in 2003.

Table 2

Number of cases contained and number reported by month during 2002*

(Countries arranged in descending order of cases in 2001)

| 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 | 677 / 1151 | 576 / 1115 | 607 / 1138 | 854 / 1612 | 2730 / 5426 | 3110 / 6429 | 3510 / 6748 | 2480 / 6442 | 3249 / 4935 | 1931 / 3289 | 1069 / 2194 | 608 / 1014 | 21401 / 41493 | | |
| NIGERIA | 350 / 647 | 195 / 336 | 148 / 220 | 152 / 232 | 205 / 244 | 222 / 314 | 143 / 198 | 125 / 246 | 107 / 175 | 163 / 245 | 319 / 427 | 407 / 536 | 2536 / 3820 | 66 | |
| GHANA | 532 / 741 | 385 / 674 | 315 / 429 | 285 / 372 | 304 / 492 | 277 / 407 | 171 / 234 | 120 / 142 | 105 / 131 | 399 / 539 | 452 / 785 | 366 / 665 | 3711 / 5611 | 66 | |
| TOGO | 148 / 193 | 65 / 100 | 20 / 40 | 12 / 26 | 44 / 100 | 54 / 83 | 71 / 235 | 44 / 81 | 52 / 72 | 173 / 207 | 160 / 213 | 90 / 152 | 933 / 1502 | 62 | |
| BURKINA FASO | 6 / 10 | 27 / 31 | 20 / 22 | 22 / 32 | 66 / 83 | 56 / 85 | 44 / 48 | 33 / 50 | 58 / 67 | 65 / 104 | 36 / 43 | 11 / 16 | 444 / 591 | 75 | |
| MALI | 4 / 5 | 4 / 5 | 4 / 6 | 0 / 0 | 2 / 6 | 5 / 9 | 23 / 43 | 78 / 178 | 178 / 302 | 139 / 205 | 46 / 76 | 18 / 26 | 501 / 861 | 58 | |
| NIGER | 6 / 6 | 0 / 0 | 0 / 0 | 0 / 0 | 4 / 4 | 5 / 5 | 25 / 40 | 19 / 30 | 23 / 30 | 37 / 83 | 22 / 39 | 8 / 11 | 149 / 248 | 60 | |
| COTE D'IVOIRE | 91 / 91 | 52 / 52 | 23 / 24 | 10 / 11 | 1 / 3 | 2 / 5 | 0 / 2 | 2 / 3 | 2 / 2 | 0 / 0 | 3 / 4 | 1 / 1 | 187 / 198 | 94 | |
| BENIN | 28 / 28 | 8 / 11 | 7 / 8 | 5 / 5 | 1 / 1 | 4 / 4 | 2 / 2 | 7 / 7 | 15 / 19 | 26 / 28 | 43 / 44 | 24 / 24 | 170 / 181 | 94 | |
| MAURITANIA | 0 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 2 / 3 | 5 / 5 | 7 / 12 | 5 / 14 | 6 / 7 | 0 / 1 | 0 / 0 | 25 / 42 | 60 | |
| UGANDA | 0 / 0 | 0 / 0 | 1 / 1 | 0 / 1 | 3 / 3 | 1 / 4 | 3 / 4 | 3 / 3 | 5 / 5 | 1 / 1 | 1 / 1 | 1 / 1 | 19 / 24 | | |
| CAR | | | | | | | | | | | | | 0 / 0 | | |
| ETHIOPIA | 0 / 0 | 0 / 0 | 2 / 3 | 1 / 6 | 11 / 11 | 6 / 7 | 5 / 5 | 6 / 6 | 6 / 6 | 1 / 1 | 2 / 2 | 0 / 0 | 40 / 47 | 85 | |
| CAMEROON | | | | | | 1 / 1 | | | | 1 / 1 | | 1 / 1 | 3 / 3 | 100 | |
| KENYA | 1 / 1 | | 3 / 3 | 3 / 3 | 4 / 4 | 1 / 1 | | 3 / 3 | 2 / 2 | | | | 17 / 17 | 100 | |
| TOTAL* | 1843 / 2873 | 1312 / 2324 | 1150 / 1894 | 1344 / 2300 | 3375 / 6377 | 3746 / 7357 | 4002 / 7564 | 2927 / 7203 | 3807 / 5760 | 2942 / 4710 | 2153 / 3829 | 1535 / 2447 | 30136 / 54638 | 55 | |
| % CONTAINED | 64 | 56 | 61 | 58 | 53 | 51 | 53 | 41 | 66 | 62 | 56 | 63 | 55 | | |

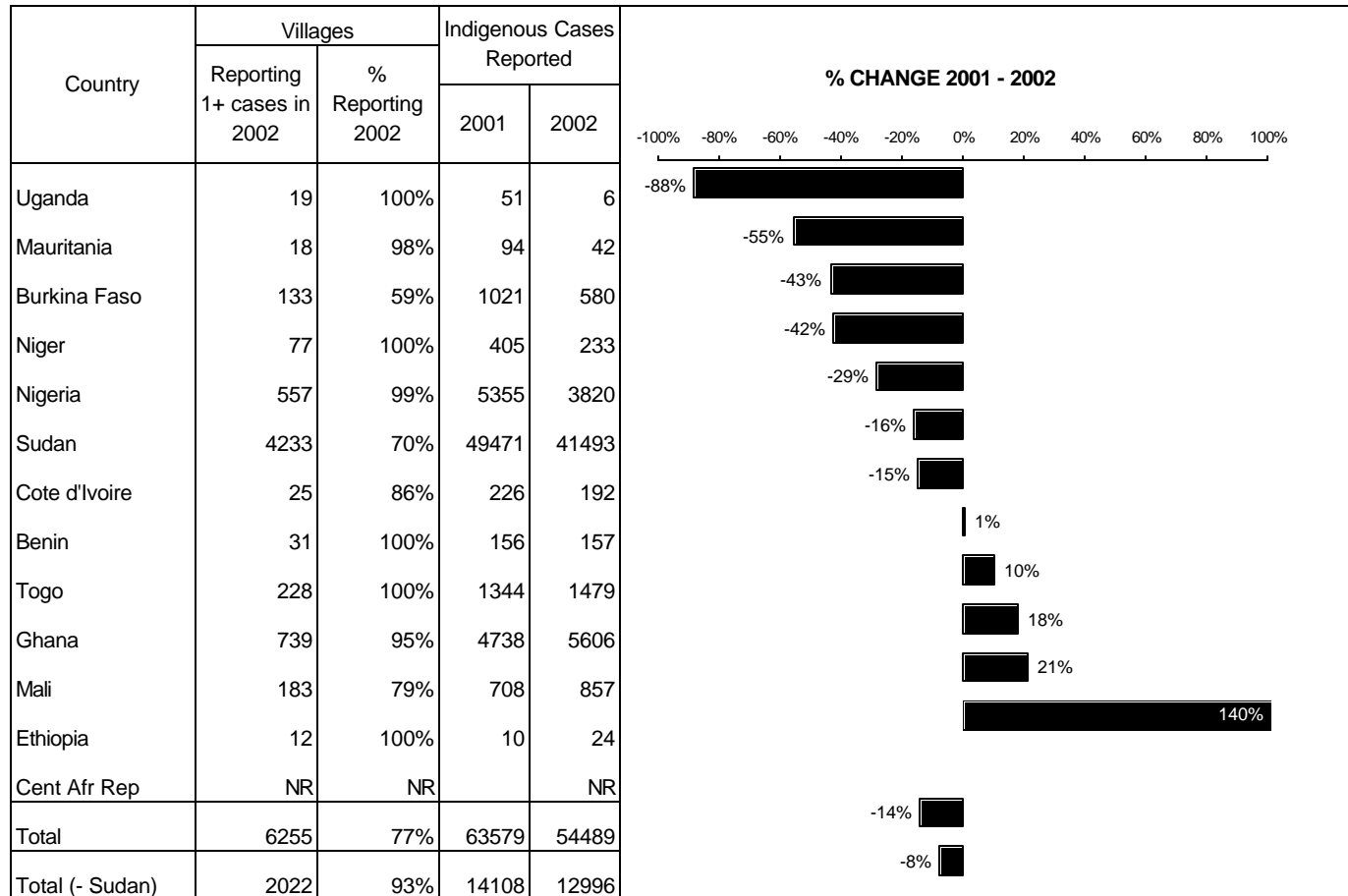
* PROVISIONAL

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

CAR did not report during 2002

Figure 1

Number of Villages/Localities Reporting Cases of Dracunculiasis in 2001, Percentage of Endemic Villages Reporting in 2002*, Number of Indigenous Cases Reporting During the Specified Period in 2001 and 2002*, and Percent Change in Cases Reported



* Provisional

Table 3

Dracunculiasis Eradication Campaign
Reported Importations and Exportations of Cases of Dracunculiasis: 2002

| From »»» To | Month and number of cases imported | | | | | | | | | | | | | | Number of caes exported from |
|--------------------------------|------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|------------|--------------------------|------------------------------|
| | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept | Oct. | Nov. | Dec. | Total | | |
| Sudan »»» Ethiopia | | | 1 | 2 | 4 | 5 | 3 | 3 | 3 | 1 | 1 | | 23 | Sudan = 58 | |
| Sudan »»» Kenya | 1 | | 3 | 3 | 4 | 1 | | 3 | 2 | | | | 17 | | |
| Sudan »»» Uganda | | | | | 2 | 1 | 4 | 1 | 7 | 1 | 1 | 1 | 18 | | |
| Ghana »»» Benin | 0 | 2 | 1 | 1 | | | | | | | 1 | 1 | 6 | Ghana = 40 | |
| Ghana »»» Burkina Faso | 1 | | | 1 | 2 | 1 | | | | | | | 5 | | |
| Ghana »»» Cote d'Ivoire | | | | | | | | 1 | | | | | 1 | | |
| Ghana »»» Niger | | | | | | | 2 | | | | | | 2 | | |
| Ghana »»» Togo | 3 | 7 | 1 | 4 | 4 | 2 | 2 | 3 | | | | | 26 | | |
| Togo »»» Benin | 2 | 1 | 4 | | 1 | | | 3 | | | 6 | 1 | 18 | Togo = 23 | |
| Togo »»» Ghana | | | | | | | | | | | | 4 | 4 | | |
| Togo »»» Burkina Faso | | | | | | 1 | | | | | | | 1 | | |
| Nigeria »»» Cameroon | | | | | | 1 | | | | 1 | | 1 | 3 | Nigeria = 9 | |
| Nigeria »»» Niger | | | | | 1 | | 1 | | 2 | | | | 4 | | |
| Nigeria »»» Togo | 1 | 1 | | | | | | | | | | | 2 | | |
| Burkina Faso »»» Côte d'Ivoire | | | | | | 2 | 2 | | | | | | 4 | Burkina Faso = 8 | |
| Burkina Faso »»» Niger | | | | | | 1 | | | 1 | | | 2 | 4 | | |
| Mali »»» Burkina Faso | | | | | | | | | 3 | | | | 3 | Mali = 7 | |
| Mali »»» Niger | | | | | | | | | 1 | 1 | 1 | 1 | 4 | | |
| Niger »»» Burkina Faso | | | | | | | | 1 | | | | | 1 | Niger = 5 | |
| Niger »»» Ghana | | | | | | | | | | | 1 | | 1 | | |
| Niger »»» Mali | | | | | | | 3 | | | | | | 3 | | |
| Mauritania »»» Côte d'Ivoire | | | | | | | | | | | 1 | | 1 | Mauritania = 1 | |
| Benin »»» Niger | | | | | | | | | | | | 2 | 2 | Benin = 3 | |
| Benin »»» Togo | | | | | | | | | 1 | | | | 1 | | |
| Cote d'Ivoire »»» Burkina Faso | | | | | | | | 1 | | | | | 1 | Cote d'Ivoire = 1 | |
| Total | 8 | 11 | 10 | 11 | 18 | 15 | 17 | 16 | 20 | 4 | 11 | 14 | 155 | | |

Figure 2

Dracunculiasis Eradication Campaign Status of Eradication Efforts: 2002

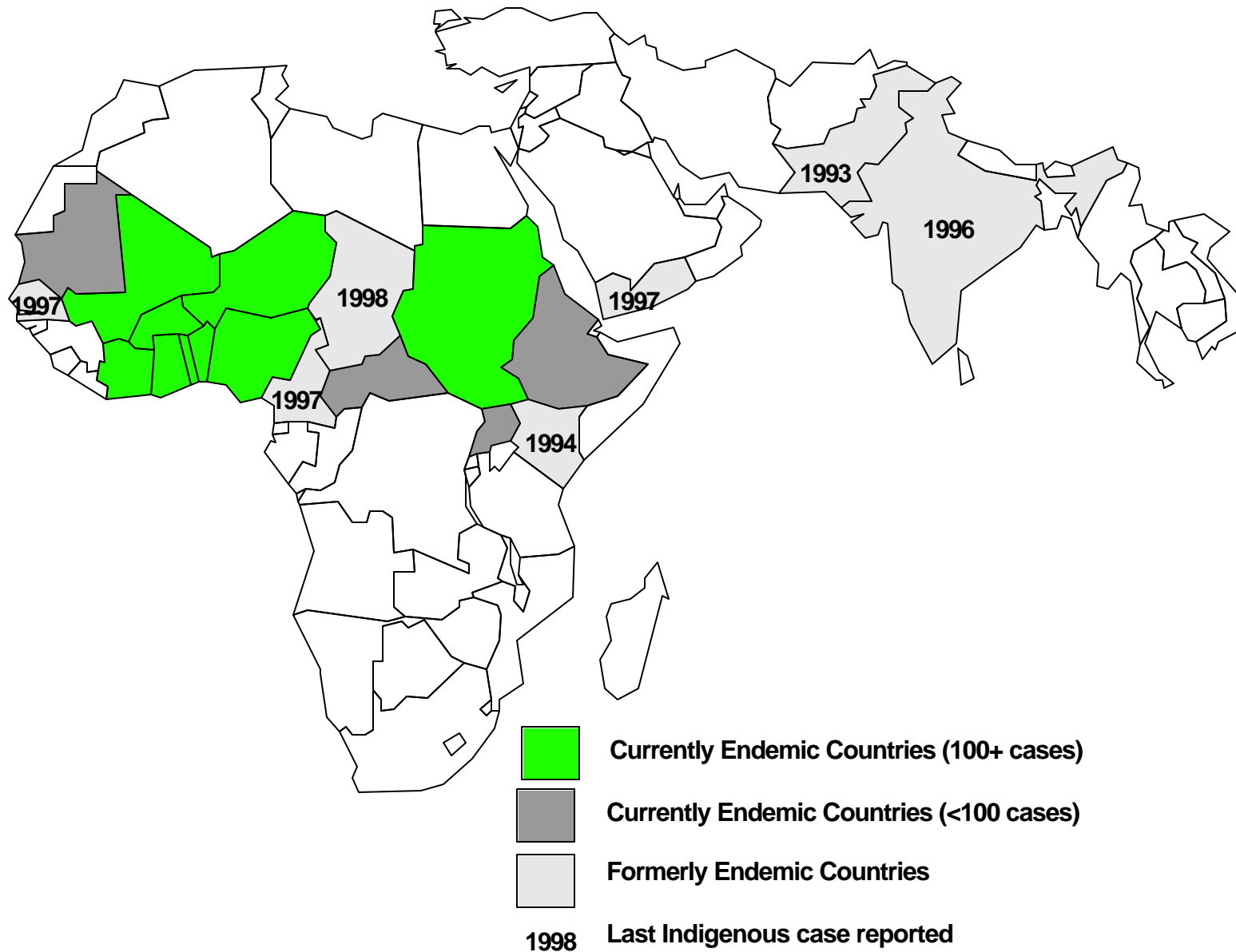


Figure 3

Distribution of Indigenous Cases of Dracunculiasis Reported During 2001 and 2002

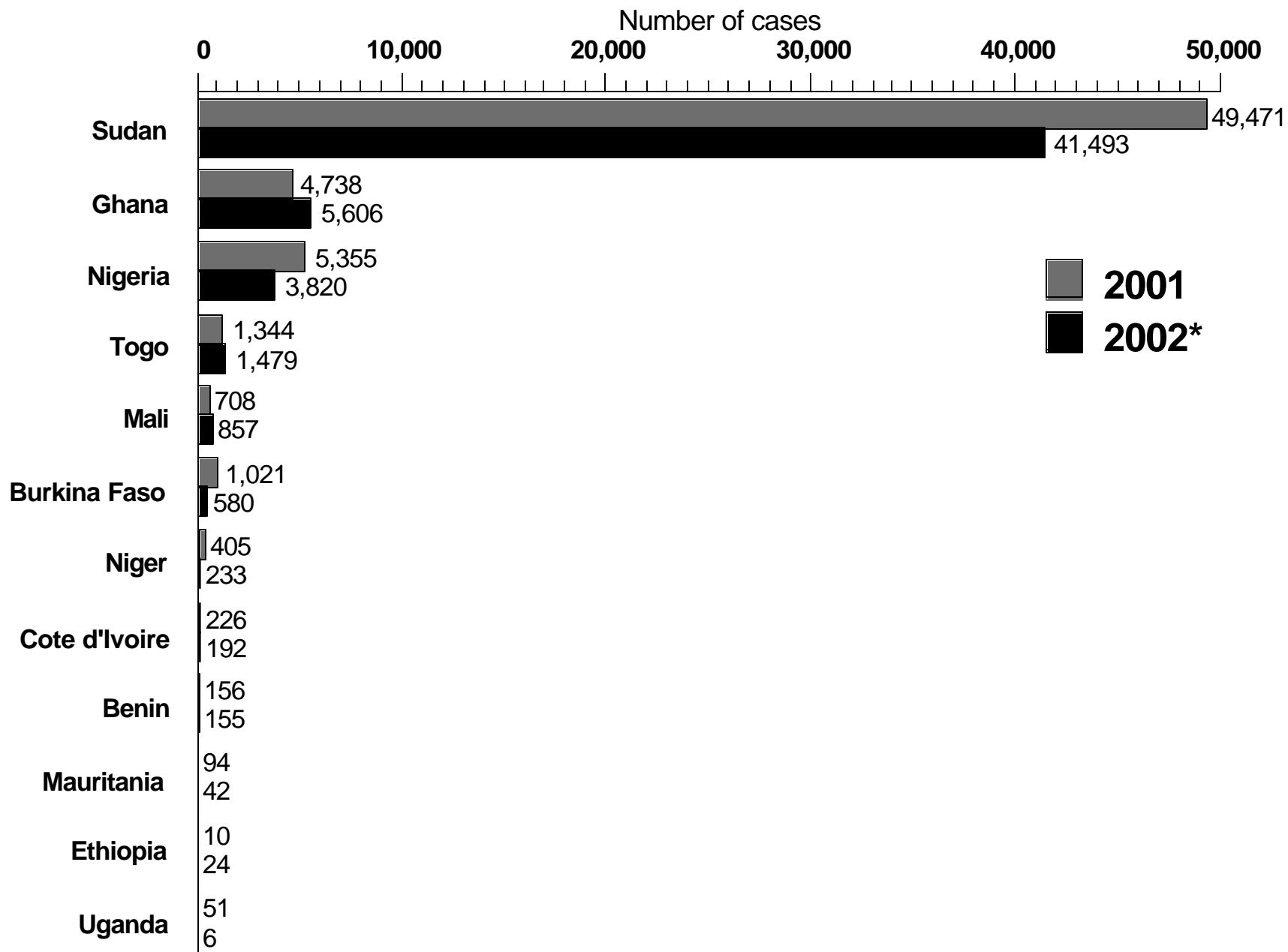


Table 4

Number of cases contained and number reported by month during 2003*

(Countries arranged in descending order of cases in 2002)

| 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 | 620 / 1082 | 258 / 487 | 262 / 497 | / / | / / | / / | / / | / / | / / | / / | / / | / / | 1140 / 2066 | 55 | |
| GHANA | 469 / 870 | 741 / 1330 | / / | / / | / / | / / | / / | / / | / / | / / | / / | / / | 1210 / 2200 | 55 | |
| NIGERIA | 389 / 568 | 179 / 245 | 103 / 125 | / / | / / | / / | / / | / / | / / | / / | / / | / / | 671 / 938 | 72 | |
| TOGO | 109 / 147 | 40 / 46 | 22 / 30 | / / | / / | / / | / / | / / | / / | / / | / / | / / | 171 / 223 | 77 | |
| MALI | 3 / 3 | 4 / 4 | 5 / 5 | / / | / / | / / | / / | / / | / / | / / | / / | / / | 12 / 12 | 100 | |
| BURKINA FASO | 6 / 6 | 3 / 4 | 0 / 2 | 0 / 2 | / / | / / | / / | / / | / / | / / | / / | / / | 9 / 14 | 64 | |
| NIGER | 0 / 0 | 1 / 1 | 0 / 0 | / / | / / | / / | / / | / / | / / | / / | / / | / / | 1 / 1 | 100 | |
| COTE D'IVOIRE | 7 / 21 | 2 / 3 | 1 / 2 | 2 / 3 | / / | / / | / / | / / | / / | / / | / / | / / | 12 / 29 | 41 | |
| BENIN | 21 / 21 | 1 / 1 | 1 / 1 | / / | / / | / / | / / | / / | / / | / / | / / | / / | 23 / 23 | 100 | |
| ETHIOPIA | 0 / 0 | 0 / 0 | 3 / 3 | 7 / 7 | / / | / / | / / | / / | / / | / / | / / | / / | 10 / 10 | 100 | |
| MAURITANIA | 0 / 0 | 0 / 0 | 0 / 0 | / / | / / | / / | / / | / / | / / | / / | / / | / / | 0 / 0 | | |
| UGANDA | 0 / 0 | 0 / 0 | 0 / 0 | 2 / 2 | / / | / / | / / | / / | / / | / / | / / | / / | 2 / 2 | 100 | |
| TOTAL* | 1624 / 2718 | 1229 / 2121 | 397 / 665 | 11 / 14 | 0 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 3261 / 5518 | 59 | |
| % CONTAINED | 60 | 58 | 60 | 79 | | | | | | | | | 59 | | |

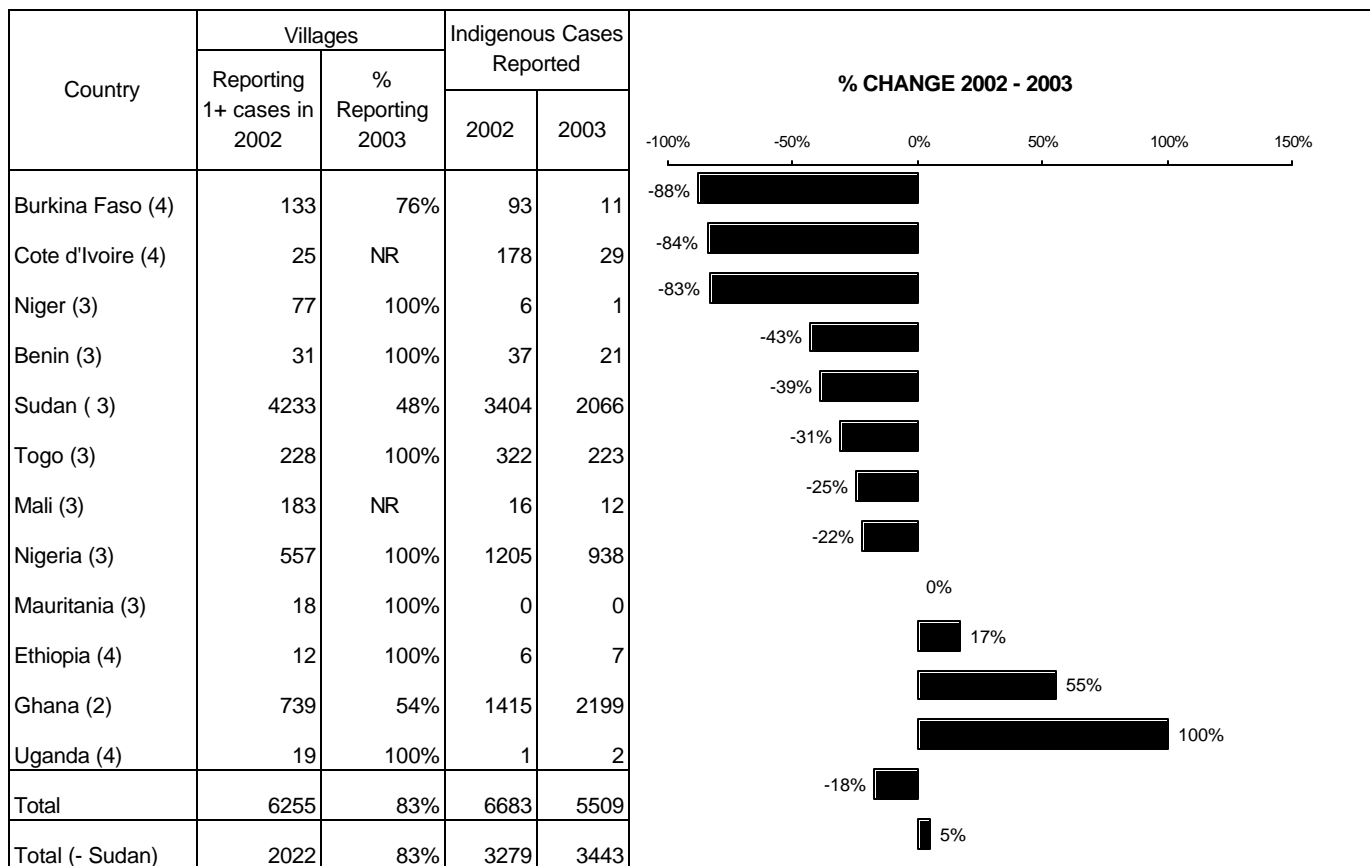
* PROVISIONAL

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

For other imported cases see table of imported cases by month and by country.

Figure 4

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



(3) Indicates month for which reports were received, i.e., Jan. - Mar. 2003

* Provisional

COTE D'IVOIRE reported 198 cases in 2002, including 6 imported cases. 170 of the cases occurred in only four contiguous villages in Tanda District, on the government-held side. Only one of the villages known to have had a case in 2002 is located in rebel-held territory. All of the villages reporting cases in Tanda District reportedly have full filter coverage, used Abate, and had at least one safe source of drinking water. Only 24 cases were reported in January-February 2003, compared to 143 cases reported during the same two months of 2002.

BENIN reportedly contained 94% of the 181 cases it reported (including 24 imported cases) in 2002, but it realized no reduction from the 157 indigenous cases it reported in 2001, despite a claimed containment rate of 95% in 2001. It has achieved a reduction of -43% in indigenous cases and contained all of them during the first quarter of 2003. A total of 128 (71%) of all Benin's cases in 2002 were contained in a hospital or containment center. 62% of the patients so contained were admitted before or within 48 hours of emergence of the worm, including 34% before or within 24 hours. 88% of all cases were in one district (Savalou), and 73% were in only five villages.

MAURITANIA reported 42 indigenous cases in 2002, which was a reduction of -55% from the 94 cases reported in 2001. Of the 18 localities that reported cases, 12 reported only one case each, and 2 reported only two cases each. Ten of the one-case villages and one of the two-case villages were "new", presumably as a result of importations from an endemic village. 25 (60%) of the cases in 2002 were reportedly contained. All villages with cases had complete filter coverage in 2001 and 2002, while coverage with Abate increased from 40% to 54%, villages with at least one safe water source from 76% to 86%, and those receiving health education increased from 84% to 100% in 2002.

ETHIOPIA reported 47 cases, of which 23 were imported from Sudan during 2002. A total of 33 cases (70%) were contained in a containment center. All of the indigenous cases were in Gambella Region; where parts of Gog, Itang, Jikawo and Akobo Districts still suffer from insecurity due to ethnic conflict, which has been compounded by misuse of program vehicles. 3 cases have been reported from the village of Awkoy in Gog District in March 2003. Trained health workers are conducting health education about dracunculiasis prevention in all camps for Sudanese refugees regularly.

UGANDA reported only 6 indigenous cases and 18 cases imported from Sudan during 2002. 75% of the cases were reportedly contained, including 19 (79%) that were contained in a case containment center. Beginning in April 2003, the reward for reporting an indigenous case was doubled, to 100,000 Ugandan shillings (US \$53) but remains at 50,000 shillings for reporting an imported case. The program discovered 2 indigenous cases in Lotome village of Kotido District in April 2003. This village reported a case in May last year, and borders Rikitae village that had an outbreak of 43 cases in 2001. Health education measures are being taken or planned for Sudanese refugees in each of the five refugee camps in Uganda. *Uganda passed Ethiopia in Guinea Worm race 2002.*

Table 5

**Reduction of Cases of Guinea Worm in Villages
Where Guinea Worm Eradication Programs Intervened in 2001**

| Country | Number of Villages/Localities Reporting cases in 2001 | Number of cases 2001 | Number of cases 2002 | Difference (%) | % Case Containment claimed in 2001 |
|---------------|---|----------------------|----------------------|----------------|------------------------------------|
| Sudan | 3613 | 45761 | 21321 | -53% | 49% |
| Ghana | 783 | 4699 | 4,462 | -5% | 68% |
| Nigeria | 729 | 5355 | 2,598 | -51% | 65% |
| Togo | 185 | 1360 | 975 | -28% | 62% |
| Mali | 142 | 718 | 471 | -34% | 51% |
| Burkina Faso | 195 | 1030 | 461 | -55% | 73% |
| Niger | 166 | 417 | 147 | -65% | 57% |
| Cote d'Ivoire | 28 | 231 | 177 | -23% | 55% |
| Benin | 39 | 172 | 152 | -12% | 95% |
| Mauritania | 25 | 94 | 30 | -68% | 52% |
| Ethiopia | 10 | 10 | 9 | -10% | 69% |
| Uganda | 14 | 55 | 4 | -93% | 64% |
| Total | 5929 | 59902 | 30807 | -49% | 53% |

Recent Publications:

Anosike JC. Azoro VA. Nwoke BE. Keke RI. Okere AN. Oku EE. Ogbulie JN. Tony-Njoku RF. Okoro OU. Nwosu DC. Dracunculiasis in the north eastern border of Ebonyi State, south eastern Nigeria. International Journal of Hygiene & Environmental Health. 206(1):45-51, 2003 January.

Etard JF. Kodio B. Traore S. Audibert M. [Water contacts in dracunculiasis -infected patients in Mali: transmission risk activities]. Bulletin de la Societe de Pathologie Exotique. 95(4): 295-8, 2002 Nov.

Moorthy VN. Sweet WC. A biological method for the control of dracontiasis. 1936 National Medical Journal of India. 15(5): 305-8, 2002 Sep-Oct.

An epidemiological and experimental study of dracontiasis in Chitaldrug District. 1932. National Medical Journal of India. 15(5): 300-5, 2002 Sep-Oct.

Jimmy Carter and life after the US Presidency. The Lancet. 361(9363); 1108-09. 2003 March.

*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 has changed to <http://www.cdc.gov/ncidod/dpd/parasites/guineaworm/default.htm>



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