



Date: November 16, 1998

From:



WHO Collaborating Center for
Research, Training and Eradication of Dracunculiasis

Subject:

GUINEA WORM WRAP-UP #84

To: Addressees

Detect Every Case, Contain Every Worm!

GENERAL GOWON JOINS NIGERIAN GUINEA WORM WAR;
MULTIPLE PROGRAM REVIEW HELD IN ABUJA

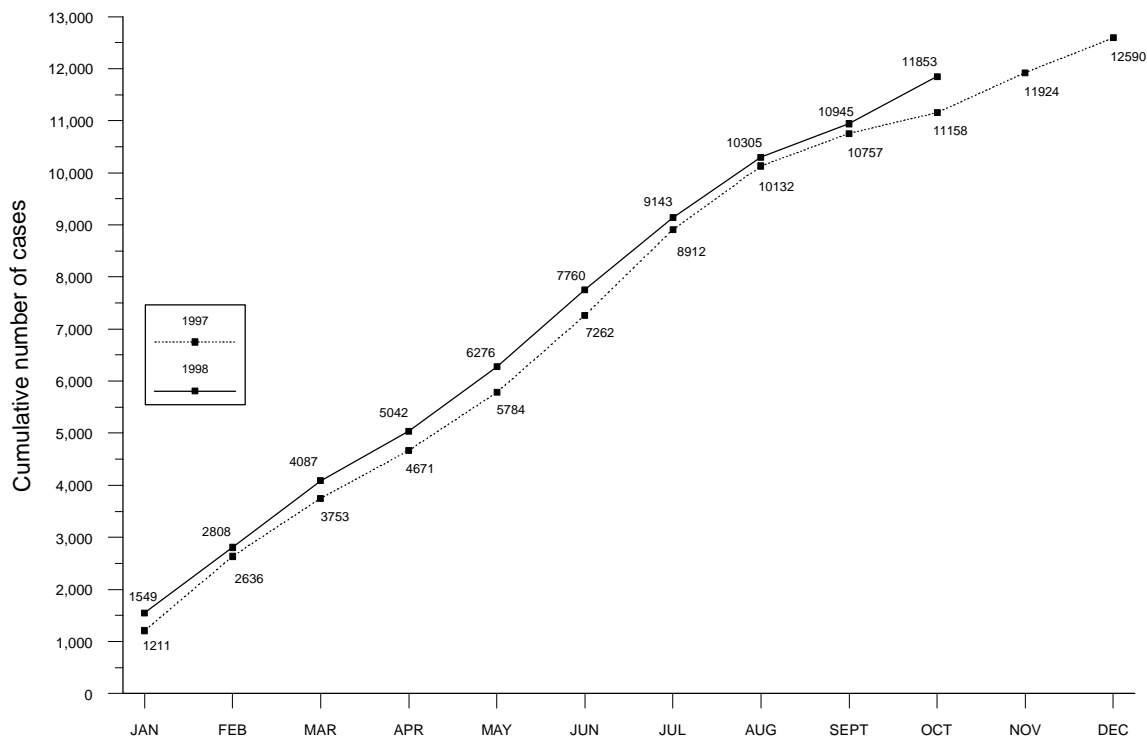


GLOBAL 2000



Former Nigerian Head of State General Dr. Yakubu Gowon has agreed to assist in the final stages of the Nigerian Guinea Worm Eradication Program (NIGEP). The agreement follows a visit by General Gowon to The Carter Center in Atlanta, USA in September this year, when he met with former U.S. President Jimmy Carter and members of Global 2000 headquarters staff. Under an agreement between the Yakubu Gowon Center and The Carter Center, General Gowon will help intensify NIGEP's social mobilization and advocacy efforts leading toward the new target to end transmission of dracunculiasis in Nigeria by the end of December 2000. Ambassador M. B. Akpang, deputy chief executive of the Gowon Center, read a goodwill message to the review meeting of Global 2000-assisted programs in Nigeria on October 28. The honorable minister of state for health, Dr. Abubakar Ali-Gombe, expressed his

Figure 1. **Nigeria Guinea Worm Eradication Program**
Cumulative number of cases of dracunculiasis reported monthly during 1997 - 1998*



Provisional: January - October 1998

ministry's elation at General Gowon's new role during his welcoming remarks to the opening session of the Program Review. NIGEP is also obtaining a new, Nigerian version of printed "Guinea Worm cloth", with support provided by The Carter Center.

The Program Reviews for Global 2000-assisted health programs in Nigeria were held at the Federal Secretariat in Abuja on October 28-30, and included review of some of the activities in the dracunculiasis eradication, onchocerciasis control, lymphatic filariasis elimination, and schistosomiasis control programs of the Federal Ministry of Health. Participants included the three national program coordinators concerned, Dr. K.A. Ojodu (dracunculiasis), Dr. J. Jiya (onchocerciasis), and Dr. (Mrs.) M.Y. Jinadu (lymphatic filariasis and schistosomiasis); Global 2000 country representative Dr. Emmanuel Miri; representatives of WHO (Dr.(Mrs) Lola Sadiq), UNICEF (Dr. E. Gemade), CDC (Mr. Ross Cox and Mr. Nick Farrell), Lions Club #404, a delegation of Global 2000 headquarters staff, and several Nigerian parasitologists, state and LGA health staff. This was the first time a joint Program Review of several parasitic disease programs was conducted in Nigeria, and it provided an opportunity for exchange of ideas and mutual stimulation among those involved in the different national programs. Dr. Gemade reported on the status of UNICEF's efforts to help provide at least one source of safe drinking water in each of the remaining endemic villages in Nigeria by the end of this year. That initiative has been hampered by shortages of petrol, which is needed to operate and transport the drilling rigs. It is not yet clear what proportion of the remaining endemic villages have been served so far, but a few dozen of the highest endemic villages have not been reached. The recommendations for NIGEP from this Review are included in this issue.

Nigeria, which is the second-highest endemic country, has reported 6% more cases in January-October 1998 (11,853) than in January - October 1997 (11,157) (Figures 1,2, Table 1). Of the four zones, only Southeast Zone has achieved a reduction in cases (-8.3%) in January-October 1998 compared to the same period of last year. The percentage changes in reported cases for the other zones are +32.9% (Southwest), +28.3% (Northeast), and -1.6% (Northwest). The increase in cases is due both to improved reporting (especially in Northeast Zone) this year, and inadequate containment of cases last year. Cases reported by month last year and this year are graphed for Zamfara, Gombe and Borno States, which are just completing their peak transmission seasons, in Figure 2. Southeast Zone has conducted repeat case searches in six of the ten states in that zone (Abia, Akwa Ibom, Benue, Cross River, Ebonyi, Enugu) between February and September this year, with the financial assistance of WHO and Global 2000. Although the number of cases reported by Nigeria has barely changed over the past two years, from 12,282 cases in 1996 to 12,590 in 1997 to 11,853 in January - October 1998, the number of known endemic villages has continued to decline significantly. From 1,360 villages that reported one or more cases in 1996, 1,135 endemic villages were reported in 1997, a reduction of 16.5%. A total of 886 Nigerian villages have reported one or more cases of dracunculiasis from January - September 1998.

Four consultants have arrived in Nigeria to assist in assuring optimal surveillance and supervision during the peak transmission season just beginning in Ebonyi, Benue, Enugu and Oyo States. The consultants are supported by The Carter Center and CDC. The Federal Minister of Health, the Honorable Prof. Debo Adeyemi, presented a memorandum on the status of the Guinea Worm Eradication Program to the 43rd Meeting of the National Council on Health at Bauchi in early October. Cross-border meetings between Guinea worm authorities of Nigeria's Borno State and Cameroon are being held monthly; the latest such meeting was held at Amchide, Republic of Cameroon on October 29th, 1998. A similar cross-border meeting was held with counterparts from the Nigerian and Nigerien Guinea Worm Eradication Programs, at Kano, Nigeria on November 3. A representative of the Niger consulate general's office at Kano attended, in addition to Niger national program coordinator Mr. Sadi Moussa and Global 2000 country representative in Niger Mr. M. Salissou Kane.

REVIEW MEETING OF GLOBAL 2000 ASSISTED PROGRAMS IN NIGERIA;
GUINEA WORM ERADICATION PROGRAM, OCTOBER 28-30,1998
HELD AT CONFERENCE HALL, FEDERAL SECRETARIAT, MAITAMA, ABUJA

After a critical review of the implementation of the Nigerian Guinea Worm Eradication Programme on the first day of the Review Meeting (October 28, 1998) it was unanimously agreed that the understated recommendations would assist the implementers to achieve total eradication by December 31, 2000. The following are the recommendations:

ALL ZONES

1. The Primary Health Care (PHC) system should strengthen its collaboration with NIGEP to ensure that the goal of eradication by December 31, 2000 will be attained.
2. Other national health programmes are encouraged to extend their activities to formerly-endemic villages and to report or instruct the community leaders to report cases of guinea worm disease, should they occur.
3. The Federal Government should direct water supply agencies to target and prioritize guinea worm villages for provision of safe drinking water in accordance with national standards (250 inhabitants per borehole; 100 per hand-dug well).
4. State and Local Governments are encouraged to provide transportation, or transportation allowances, to enable first-line supervisors to visit their endemic villages monthly.
5. NIGEP should investigate the role of nomadic peoples in the transmission of guinea worm disease.
6. All NIGEP Zones must maintain 100% coverage of all households in endemic villages with filters.
7. The zones should implement the international standards for case containment and ensure that all cases of guinea worm disease are kept under observation until the worms are manually extracted.
8. Every village should have a Village Health Committee/Task Force to assist and support the NIGEP VBHWs.
9. NIGEP should negotiate with the Village Health Committees/Task Forces of all endemic villages an agreement that describes the roles and obligations of both NIGEP and communities in the eradication of guinea worm disease.
10. Prior to distribution, and during each monthly supervisory visit to endemic villages, filters should be checked for any defects and if defects are detected, filters should be replaced.
11. Increase advocacy for the programme by encouraging State and Local Government officials to visit endemic villages.
12. The Federal Ministry of Health should, through the National Council of Traditional Medicine Practitioners, ban the practice of "Tsekiya" in the treatment of guinea worm disease.

SOUTHWEST ZONE

1. Intensify the investigate the origin of cases in new or reinfected endemic villages to better understand the movement of guinea worm through the zone.
2. Improve the quality of first-line supervision by:
 - continuing to use the available checklist for supervision to assess VBHW performance including verification of reported cases;
 - continuing to visit each endemic village monthly; but bi-weekly during the peak transmission season.

- working with LGAs to increase the number of first-line supervisors; and
- establishing a Village Task Force (VTF) for all endemic villages.

SOUTHEAST ZONE

1. Supervisory staff of the SE Zone need to ensure that village-based surveillance is proactive and all cases are detected and contained. Supervisors should always check a sample of households to ascertain that additional unreported cases are prevented in the village.

NORTHWEST ZONE

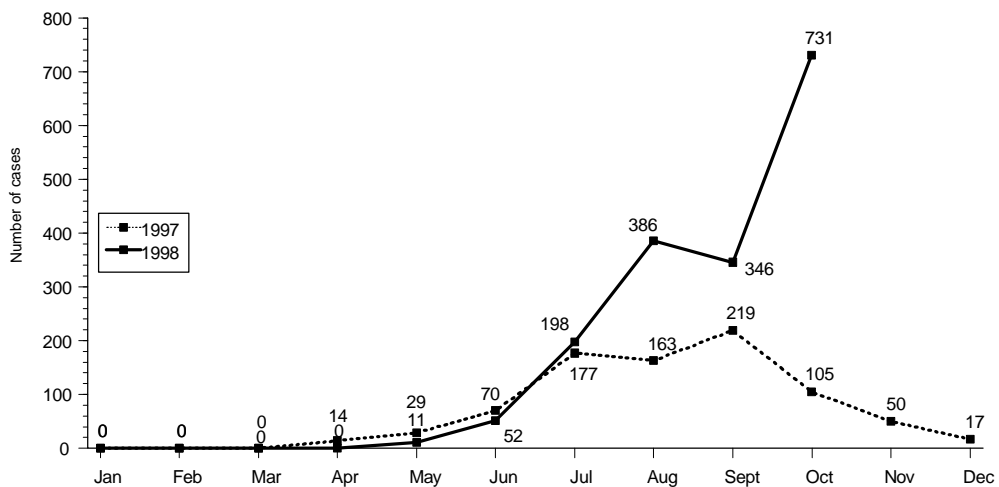
1. NW Zone should conduct active case searches in formerly-endemic states to verify absence of transmission of guinea worm disease.
2. In order to increase the percentage of cases contained, the NW Zone needs to help endemic villages develop a capacity for detecting and self-containing all cases during periods when these villages become inaccessible to the zonal staff visits during the rainy season.
3. Train at least two medical officers who are personally committed to the art and science of worm extraction for each state so as to reduce the burden on the “originator”.
4. Encourage NIGEP staff to continue working with community leaders to discourage the practice of “Tsekiya.”
5. Improve the quality of first-line supervision by:
 - continuing to use the available checklist for supervision to assess VBHW performance including verification of reported cases;
 - continuing to visit each endemic village monthly; but bi-weekly during the peak transmission season.
 - working with LGAs to increase the number of first-line supervisors; and
 - establishing a Village Task Force (VTF) for all endemic villages.

NORTHEAST ZONE

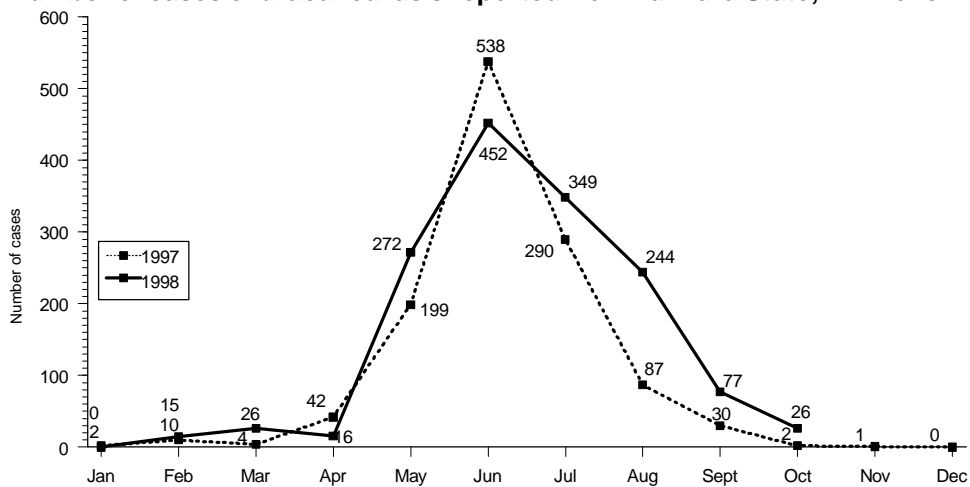
1. Prioritize the 20 most highly-endemic villages and the 11 most highly-endemic LGAs for filter coverage.
2. Encourage the zone to pilot the reward system to enhance the sensitivity of surveillance and the effectiveness of case containment, and to report to the Steering Committee on the results.
3. To reduce the cost of filter cloth during 1999, the NE Zone should consider cutting nylon filter cloth into pieces 15 cm x 15 cm and sewing these on pieces of heavier cotton cloth 50cm x 50 cm.
4. Encourage NIGEP staff to continue working with community leaders to discourage the practice of “Tsekiya.”
5. Improve the quality of first-line supervision by:
 - continuing to use the available checklist for supervision to assess VBHW performance including verification of reported cases;
 - continuing to visit each endemic village monthly; but bi-weekly during the peak transmission season.
 - working with LGAs to increase the number of first-line supervisors; and
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Figure 2

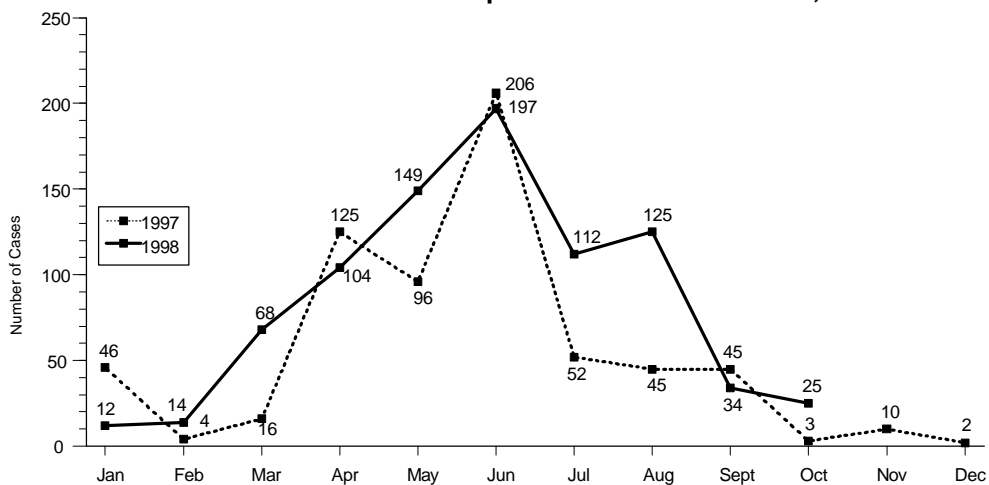
Nigeria Guinea Worm Eradication Program
Number of cases of dracunculiasis reported from Borno State, NE Zone: 1997-1998*



Number of cases of dracunculiasis reported from Zamfara State, NW Zone: 1997-1998*



Number of cases of dracunculiasis reported from Gombe State, NE Zone: 1997-1998*



*Provisional

IS GUINEA WORM DISEASE ENDEMIC IN CENTRAL AFRICAN REPUBLIC?

As the Guinea Worm Eradication Program draws closer to conclusion, the question of whether or not autochthonous cases of dracunculiasis are occurring in the Central African Republic (C.A.R.) or not becomes increasingly important. C.A.R. borders three known endemic countries (Cameroon, Chad, Sudan), and is listed by WHO (1996 and 1997 Dracunculiasis Global Surveillance Summaries in the Weekly Epidemiological Record) and by the International Commission for Certification of Dracunculiasis Eradication (in the report of its Third Meeting, in February 1998) as “endemic” for dracunculiasis. According to the global surveillance summaries, C.A.R. reported 8 indigenous and 10 imported cases in 10 endemic (sic) villages in 1995, 9 indigenous cases in 8 endemic villages in 1996 and 5 cases in 3 endemic villages in 1997. The documentation of these alleged cases, however, is extremely poor or lacking. The report of cases in 1996, for example, is based on retrospective observation of supposedly “typical scars” in people who said they had had a worm emerge. What is needed is specific evidence to indicate that the cases reported in C.A.R. were confirmed by a reliable medical authority (did the observer actually see a worm emerging?), and if so, whether the likelihood of the infection having been imported from another country has been excluded. With so much at stake, more thorough investigation and more convincing evidence are badly and urgently needed to establish or refute the existence of indigenous cases of dracunculiasis in C.A.R., just as all other countries have done. The difficulties of accessing the remote suspect areas, and recent civil disruptions, won't make conducting a proper investigation to establish endemicity (and if indicated, implement effective control measures) easy. Neither will they excuse incorrect assurances to the contrary.

TWO DONATIONS FOR SUDAN



AGCO Corporation of Atlanta, Georgia, through its subsidiary AGCO Limited of Coventry, England, has donated seven new tractors for use by the Guinea Worm Eradication Program of Sudan, in response to an appeal by The Carter Center. The tractors were requested by the program to facilitate access by program personnel to remote endemic areas during the rainy season. They are expected to be delivered to Port Sudan before the end of this year.



The Embassy of the Netherlands in Khartoum has informed The Carter Center of its government's donation of an additional grant of 950,000 Dutch guilders (~US\$ 500,000). The grant to The Carter Center is in support of the Center's assistance to the Guinea Worm Eradication Program of Sudan for the year ending March 31, 1999.

UNITED KINGDOM PROVIDES MORE SUPPORT

DFID

Department for
International
Development



The United Kingdom's Secretary of State for International Development, Clare Short, has announced her government's continuation of support for The Carter Center's role in the global campaign to eradicate dracunculiasis. The Department for International Development (DFID) will provide the Center a three year grant totaling \$2.5 million.

VESTERGAARD-FRANSDEN DONATES FILTER CLOTH

KVF

DCT

Disease Control Textiles

Mr. Torben Vestergaard Frandsen, director of Vestergaard Frandsen, has notified The Carter Center of his company's donation of 3,000 square meters of filter material to Global 2000 for use in the Guinea worm eradication campaign. The donation also includes costs of shipping the material to Africa.

IN BRIEF:

- American Cyanamid Company of American Home Products has informed us that 4000 liters of donated Abate 500E was shipped to Accra, Ghana and an identical amount to Lagos, Nigeria in early November. The estimated time of arrival (ETA) at those ports is December 13. A separate shipment of similar amount is expected to go to Mombasa, Kenya soon.
- The 36th meeting of the Interagency Coordinating Group for Dracunculiasis Eradication will be held at World Bank headquarters in Washington, D.C. on January 13, 1999.

DR RANQUE RETIRES FROM WHO



Dr. Philippe Ranque, chief of the Dracunculiasis Eradication Unit at WHO headquarters, retired from WHO at the end of October. Dr. Ranque joined the Guinea Worm Eradication Program at WHO in early 1988, after many years of medical research and teaching in Mali and Senegal. He made his first public appearance in the campaign at the Second African Regional Conference on Dracunculiasis Eradication, at Accra, Ghana, in March of that year. A close friend and protege of the late Dr. Fergus McCullough, Philippe was an early, almost solitary advocate for Guinea worm eradication at WHO during the early days of his tenure at WHO headquarters. We wish him a long and enjoyable retirement, and salute him for his constructive labors in support of the global campaign.

RECENT PUBLICATIONS

Bloch P, Simonsen PE, 1998. Studies on immunodiagnosis of dracunculiasis. I. Detection of specific serum antibodies. Acta Tropica, 70:73-86.

Bloch P, Vennervald BJ, Simonsen PE, 1998. Studies on immunodiagnosis of dracunculiasis. II. Search for circulating antigens. Acta Tropica, 70:303-315.

Bloch P, Simonsen PE, Weiss N, Nutman TB, 1998. The significance of guinea worm infection in the immunological diagnosis of onchocerciasis and bancroftian filariasis. Trans Roy Soc Trop Med Hyg, 92:518-521.

Huq A, Xu B, Chowdhury MAR, Islam MS, Montilla R, Colwell RR, 1996. A simple filtration method to remove plankton- associated Vibrio cholerae in raw water supplies in developing countries. Applied and Environmental Microbiology, 62:2508-2512

Table 1

Number of cases contained and number reported by month during 1998*
(Countries arranged in descending order of cases in 1997)

| COUNTRY | NUMBER OF CASES CONTAINED / NUMBER OF CASES REPORTED | | | | | | | | | | | | | CONT. | % |
|---------------|--|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|------------|----------|----------|---------------|-------|---|
| | JANUARY | FEBRUARY | MARCH | APRIL | MAY | JUNE | JULY | AUGUST | SEPTEMBER | OCTOBER | NOVEMBER | DECEMBER | TOTAL* | | |
| SUDAN | 465 / 1328 | 856 / 1254 | 889 / 1524 | 1618 / 2627 | 2126 / 3475 | 3572 / 5948 | 2763 / 6085 | 2622 / 4334 | 2875 / 4434 | / | / | / | 17786 / 31009 | 57 | |
| NIGERIA | 1520 / 1549 | 1166 / 1259 | 1186 / 1279 | 847 / 955 | 949 / 1234 | 953 / 1484 | 947 / 1383 | 764 / 1163 | 394 / 640 | 479 / 907 | / | / | 9205 / 11853 | 78 | |
| GHANA ** | 870 / 1277 | 535 / 709 | 478 / 554 | 276 / 382 | 208 / 263 | 169 / 226 | 132 / 178 | 40 / 58 | 53 / 67 | / | / | / | 2761 / 3714 | 74 | |
| NIGER | 7 / 11 | 4 / 4 | 5 / 5 | 42 / 43 | 129 / 168 | 277 / 367 | 411 / 687 | 378 / 575 | 315 / 468 | 154 / 237 | / | / | 1722 / 2565 | 67 | |
| BURKINA FASO | 1 / 1 | 1 / 6 | 1 / 17 | 11 / 158 | 118 / 289 | 95 / 489 | 170 / 535 | 43 / 79 | / | / | / | / | 440 / 1574 | 28 | |
| TOGO | 78 / 265 | 25 / 130 | 36 / 94 | 32 / 47 | 30 / 47 | 57 / 74 | 59 / 124 | 73 / 123 | 101 / 243 | 158 / 326 | / | / | 649 / 1473 | 44 | |
| UGANDA *** | 7 / 8 | 3 / 6 | 24 / 43 | 164 / 226 | 204 / 295 | 154 / 182 | 116 / 127 | 64 / 70 | 45 / 48 | 30 / 32 | / | / | 811 / 1037 | 78 | |
| COTE D'IVOIRE | 151 / 251 | 110 / 138 | 115 / 184 | 65 / 195 | 110 / 158 | 96 / 121 | 32 / 40 | 24 / 39 | 10 / 53 | / | / | / | 713 / 1179 | 60 | |
| MALI | 9 / 10 | 2 / 5 | 0 / 0 | 18 / 24 | 4 / 8 | 21 / 63 | 41 / 94 | 93 / 149 | 76 / 101 | / | / | / | 264 / 454 | 58 | |
| BENIN | 88 / 103 | 22 / 36 | 10 / 10 | 29 / 30 | 26 / 26 | 10 / 10 | 6 / 6 | 8 / 8 | 25 / 25 | / | / | / | 224 / 254 | 88 | |
| ETHIOPIA | 1 / 1 | 6 / 6 | 10 / 11 | 58 / 60 | 70 / 73 | 87 / 89 | 79 / 84 | 28 / 28 | 5 / 5 | 0 / 0 | / | / | 344 / 357 | 96 | |
| MAURITANIA | 0 / 0 | 0 / 0 | 0 / 0 | 4 / 4 | 0 / 0 | 1 / 1 | ? / 27 | / | / | / | / | / | 5 / 32 | 16 | |
| CHAD | 0 / 0 | 2 / 2 | 0 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | / | / | 2 / 2 | 100 | |
| YEMEN | 0 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | / | / | / | / | 0 / 0 | - | |
| SENEGAL | 0 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | / | / | / | / | 0 / 0 | - | |
| CAMEROON **** | 0 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 1 / 2 | 4 / 4 | 8 / 8 | 5 / 5 | 2 / 2 | / | / | / | 20 / 21 | 95 | |
| TOTAL* | 3197 / 4804 | 2732 / 3555 | 2754 / 3721 | 3164 / 4751 | 3975 / 6038 | 5496 / 9058 | 4764 / 9378 | 4142 / 6631 | 3901 / 6086 | 821 / 1502 | 0 / 0 | 0 / 0 | 34946 / 55524 | 63 | |
| % CONTAINED | 67 | 77 | 74 | 67 | 66 | 61 | 51 | 62 | 64 | 55 | | | 63 | | |

* Provisional

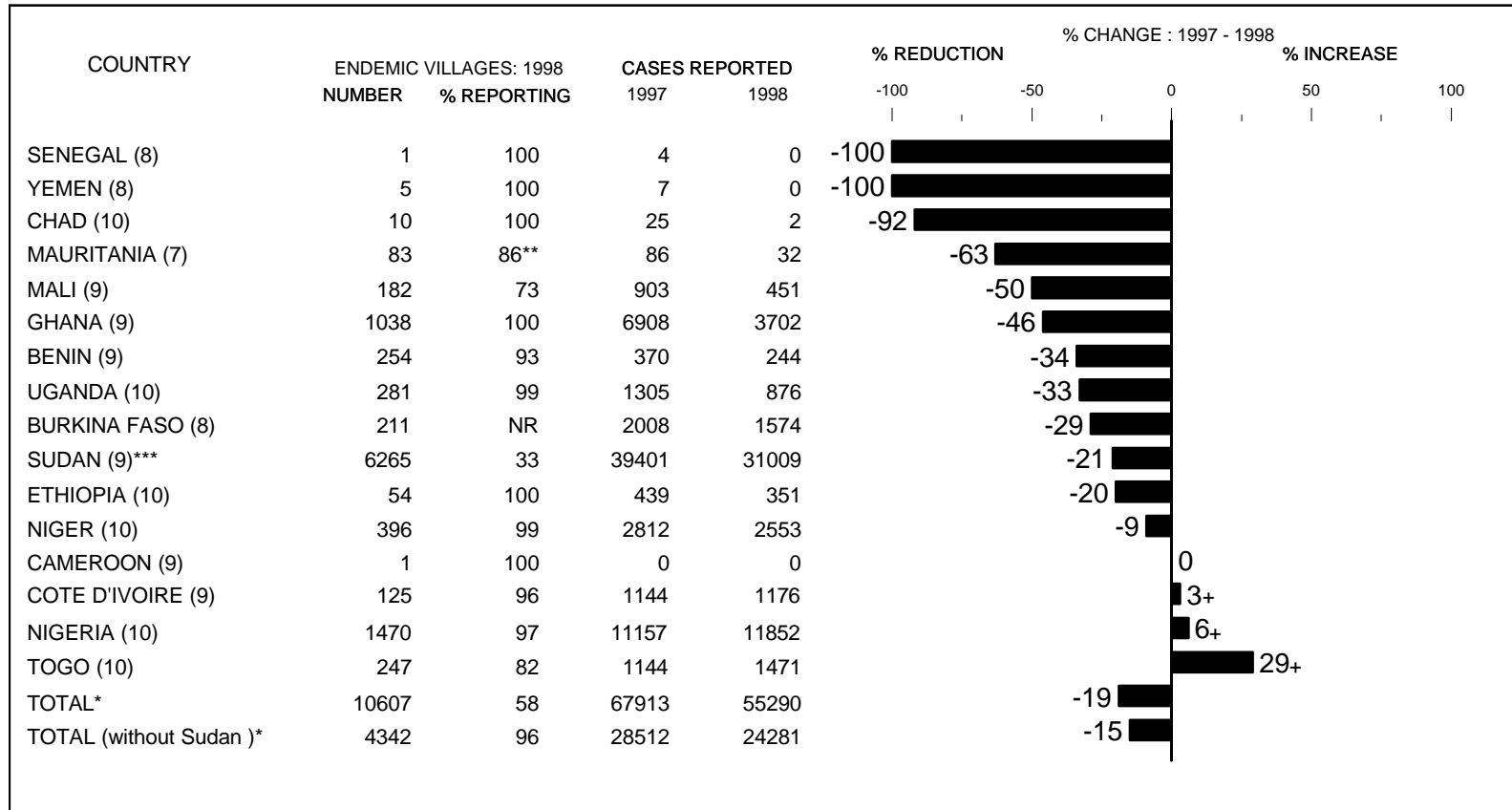
** Reported 1 case imported from Togo in May and 11 in June.

*** Reported 5 cases imported from Sudan in March, 13 in April, 49 in May, 41 in June, 45 in July, 7 in August, and 1 in September.

**** Reported 2 cases imported from Nigeria in May, 4 in June, 8 in July, 5 in August, and 2 in September.

Figure 3

Percentage of endemic villages reporting and percentage change in number of indigenous cases of dracunculiasis during 1997 and 1998 *, by country



* Provisional. Totals do not include imported cases.

** During January - March. Percent reporting since April not reported.

*** Countries with low rate of reporting (< 50%) from endemic villages. Percent reductions are over estimates due to under reporting from endemic villages.

(8) Denotes number of months for which reports were received, e.g., Jan. - Aug., 1998

NR Indicates No Reports Received.

Table 2

Dracunculiasis Eradication Campaign
Reported Importations of Cases of Dracunculiasis: 1998*

| From | To | Cases | | | | |
|---------------|---------------|-----------|------------|------------|------------|---|
| | | Month | Number | Contained | Notified* | |
| Benin | Niger | July | 1 | 0 | 1 | |
| Burkina Faso | Niger | January | 1 | 1 | 1 | |
| | | June | 2 | 1 | 2 | |
| | | July | 3 | 0 | 3 | |
| | | September | 1 | 1 | 1 | |
| | Mali | July | 1 | ? | ? | |
| | | September | 2 | ? | ? | |
| | Cote d'Ivoire | June | 1 | 1 | 1 | |
| | | July | 1 | 0 | 1 | |
| August | | 1 | 1 | 1 | | |
| Cote d'Ivoire | Togo | February | 1 | ? | 1 | |
| Ghana | Benin | January | 4 | 4 | 4 | |
| | | March | 1 | 1 | 1 | |
| | Togo | June | 1 | ? | 1 | |
| Niger | Nigeria | August | 1 | ? | 1 | |
| | Ghana | October | 1 | ? | ? | |
| Nigeria | Cameroon | May | 2 | 2 | 2 | |
| | | June | 4 | 4 | 4 | |
| | | July | 8 | 8 | 8 | |
| | | August | 5 | 5 | 5 | |
| | | September | 2 | 2 | 2 | |
| | Benin | January | 1 | 1 | ? | |
| | | April | 1 | 1 | 1 | |
| | Niger | February | 2 | 2 | 1 | |
| | | April | 1 | 1 | 1 | |
| | | May | 1 | ? | 1 | |
| | | July | 1 | ? | 1 | |
| | | August | 1 | ? | 1 | |
| | | September | 1 | ? | 1 | |
| | | October | 1 | ? | 1 | |
| | Sudan | Ethiopia | May | 2 | 2 | ? |
| | | | June | 3 | 3 | ? |
| July | | | 1 | 1 | 1 | |
| Uganda | | March | 5 | 5 | 5 | |
| | | April | 13 | 2 | 13 | |
| | | May | 49 | 17 | 49 | |
| | | June | 41 | 41 | 41 | |
| | | July | 45 | 45 | 45 | |
| | | August | 7 | 2 | 7 | |
| | | September | 1 | 1 | 1 | |
| Togo | Benin | April | 1 | 1 | 1 | |
| | | May | 1 | 1 | ? | |
| | | July | 1 | 1 | 1 | |
| | Ghana | May | 1 | 1 | ? | |
| | | June | 11 | 11 | ? | |
| | | November | 1 | 1 | 1 | |
| Total | | | 237 | 171 | 213 | |

* Provisional

** Notified to country of origin through WHO.

Figure 4

Dracunculiasis Eradication Reported Importations of Cases of Dracunculiasis:

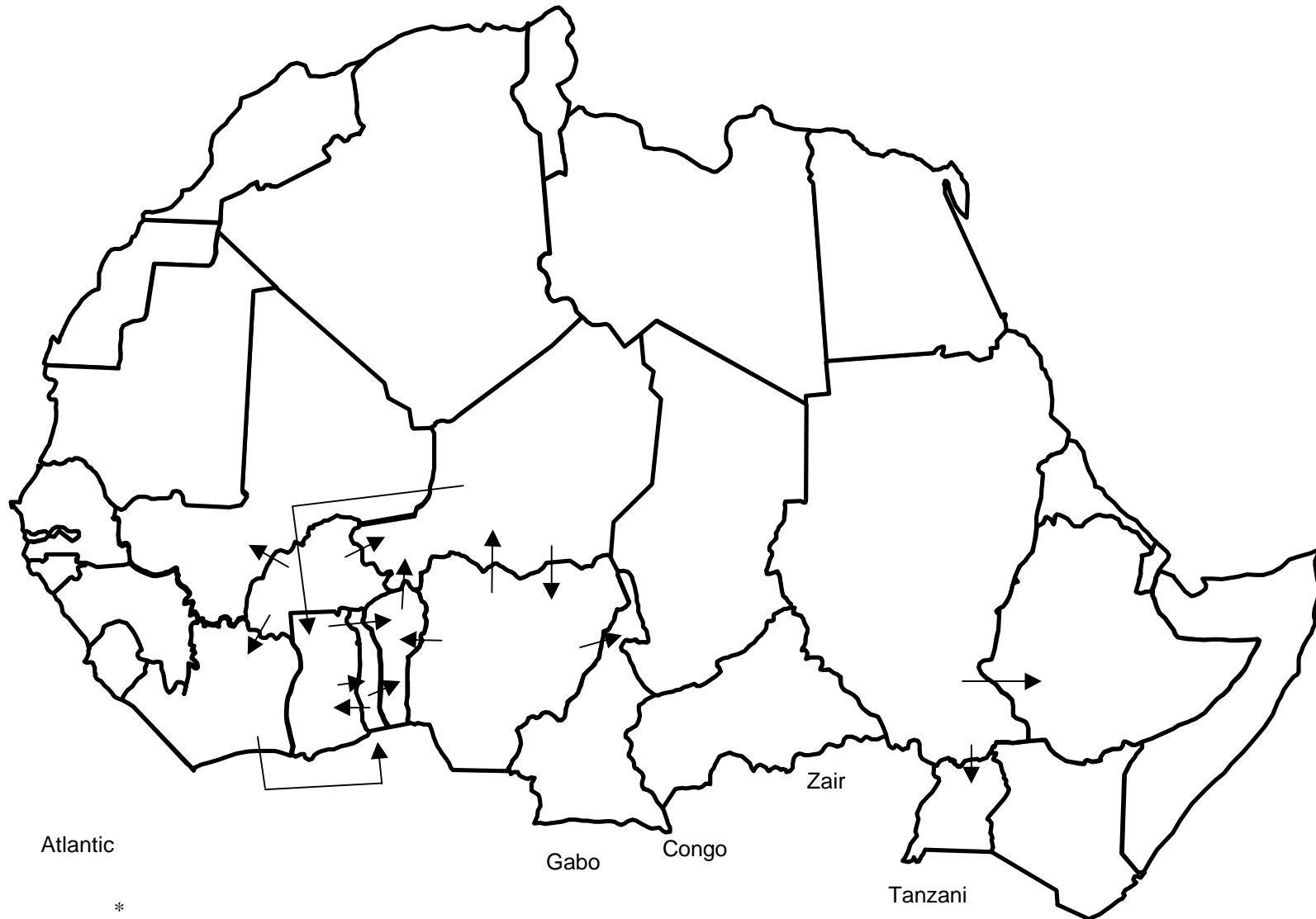
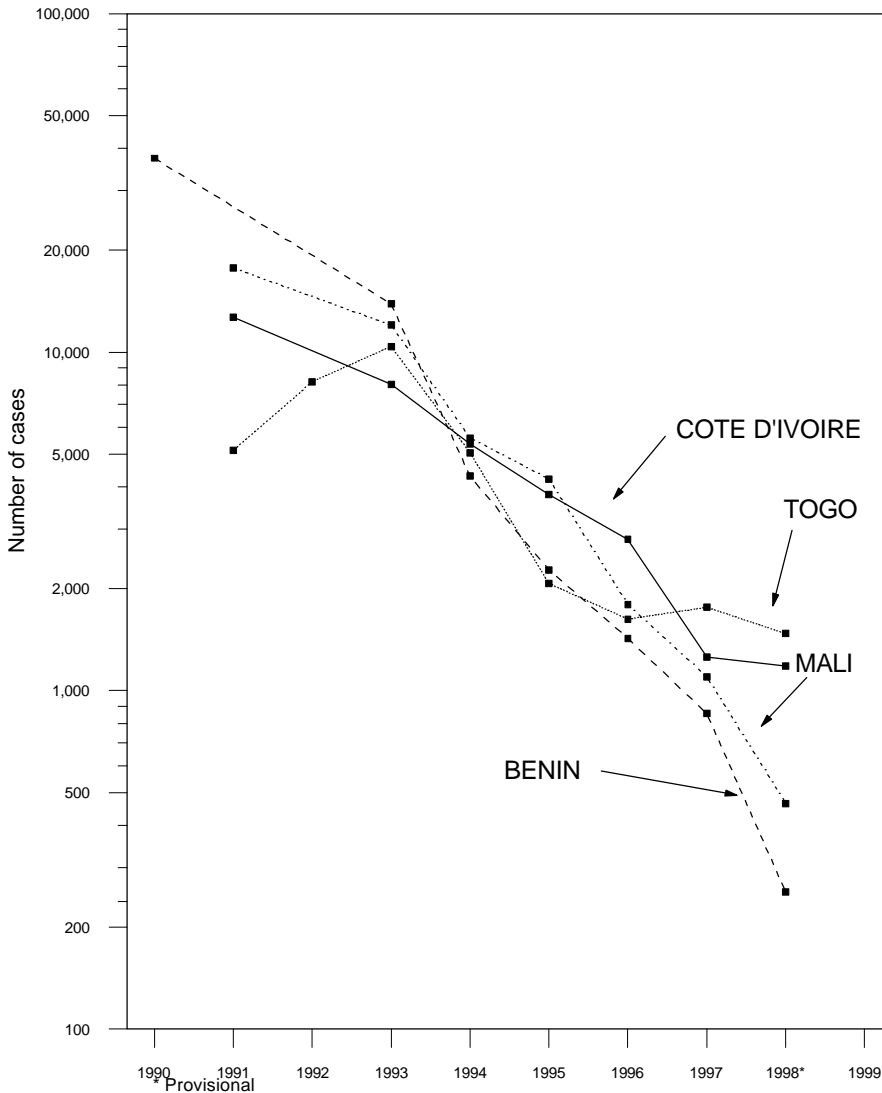


Figure 5 **Decline of cases of Dracunculiasis in Benin, Cote d'Ivoire, Mali, And Togo: 1990 - 1998***



*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 Trenton K. Ruebush, MD, 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) 488-4532.



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