



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Services
Agency for Toxic Substances
and Disease Registry

Date June 15, 1998

From



WHO Collaborating Center
Research, Training and Eradication of Dracunculiasis

Subject

GUINEA WORM WRAP-UP #79

To Addresses

Detect Every Case, Contain Every Worm!

NEEDED: BETTER SUPERVISION OF VILLAGE-BASED HEALTH WORKERS

Over the past several years, evaluations and consultations to national Guinea Worm Eradication Programs have consistently highlighted the importance and frequent inadequacy of supervision of village-based health workers and/or village volunteers in almost every program which has been reviewed. Programs must correct this crucial weakness in order to stop transmission in the remaining endemic areas. If village-based workers don't do their jobs properly, programs cannot succeed. It is a major responsibility of staff at national and district levels of Guinea Worm Eradication Programs to ensure that village-based health workers get the support they need in order to perform their duties correctly.

The three essential duties of village-level workers are:

- to actively search for cases of dracunculiasis in the areas for which they are responsible, record information about each patient in a village case register, and report any cases detected monthly. The standard of performance for this task is that every case should be detected within 24 hours of emergence of the worm;
- to apply appropriate containment measures immediately after discovery of each case; and
- to help mobilize and educate their communities to report cases immediately, prevent entry of patients into drinking sources, always filter unsafe drinking water, seek provision of safe sources of drinking water, and cooperate with the use of Abate.

Regular, effective supervision of village-based workers (VBW) is the key to helping them perform their essential tasks well. Supervisors should visit each village-based worker at least monthly (twice a month if possible), and use a checklist to make sure that all important activities are reviewed. The quality and quantity of supervisory visits are both important. If conducted properly, such regular supportive visits will serve as inservice training, thereby helping and encouraging each VBW to improve his or her performance until the desired level is attained, and then to maintain that level of performance. In addition to providing a checklist for supervisory visits, programs should ensure that all supervisors at each level have the support they need to do their jobs. For example, suitable transportation (motorbikes, bicycles, fuel, maintenance, etc.) when needed, sufficient compensation so that field supervisors are paid for extra expenses when they are away from the office, and adequate supplies (replenishments for first aid kits, forms, filters, any appropriate incentives or rewards, if applicable) to leave with the VBWs. Programs should also establish clear priorities for the highest endemic geographic areas on which to concentrate scarce time, fuel, and other resources for assuring regular supervision.

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													%
	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL*	
SUDAN	379 / 1194	459 / 633	323 / 514	/	/	/	/	/	/	/	/	/	1161 / 2341	50
NIGERIA	1982 / 2020	1224 / 1305	1210 / 1278	854 / 942	/	/	/	/	/	/	/	/	5270 / 5545	95
GHANA	670 / 1277	535 / 709	478 / 554	276 / 382	/	/	/	/	/	/	/	/	1959 / 2922	67
NIGER	7 / 11	4 / 4	5 / 5	42 / 43	129 / 168	/	/	/	/	/	/	/	187 / 231	81
BURKINA FASO	/ 1	/ 7	/ 13	/ 100	/ 8	/	/	/	/	/	/	/	0 / 129	0
TOGO	66 / 230	17 / 104	15 / 52	14 / 22	/	/	/	/	/	/	/	/	112 / 408	27
UGANDA	7 / 8	3 / 6	24 / 43	167 / 226	188 / 295	/	/	/	/	/	/	/	389 / 578	67
COTE D'IVOIRE	151 / 251	110 / 138	115 / 184	65 / 195	/	/	/	/	/	/	/	/	441 / 768	57
MALI	9 / 10	2 / 5	0 / 0	17 / 21	/	/	/	/	/	/	/	/	28 / 36	78
BENIN	88 / 99	22 / 36	9 / 9	28 / 29	/	/	/	/	/	/	/	/	147 / 173	85
ETHIOPIA	1 / 1	6 / 6	10 / 10	59 / 61	66 / 68	/	/	/	/	/	/	/	142 / 146	97
MAURITANIA	0 / 0	0 / 0	0 / 0	/	/	/	/	/	/	/	/	/	0 / 0	~
CHAD	0 / 0	2 / 2	0 / 0	0 / 0	0 / 0	/	/	/	/	/	/	/	2 / 2	100
YEMEN	0 / 0	0 / 0	0 / 0	/	/	/	/	/	/	/	/	/	0 / 0	~
SENEGAL	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	/	/	/	/	/	/	/	0 / 0	~
CAMEROON**	0 / 0	0 / 0	0 / 0	0 / 0	1 / 1	/	/	/	/	/	/	/	1 / 1	254
TOTAL*	3360 / 5102	2384 / 2955	2189 / 2662	1522 / 2021	384 / 540	/	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	9839 / 13280	74
% CONTAINED	66	81	82	75	71								74	

* Provisional

** Reported 1 imported case from Nigeria in May 1998

The process of a supervisory visit to an endemic village should routinely

- a) begin with a courtesy call and interview of the village chief,
- b) proceed to a review of records and discussion of activities with the VBW,
- c) include spot checks and interviews of a few individuals and households in the village, and at one or more ponds, if appropriate, and
- d) review and discuss findings with the VBW and the chief, compliment strong points, make suggestions for correcting any deficiencies, and replenish supplies, if necessary. Supervisors of the supervisors should check whether these steps are routinely conducted in villages visited by the first line supervisors. The program in southeastern Nigeria has found that other members of a village Task Force for Guinea Worm Eradication can help provide oversight for their VBW.

Review of supervisory checklists developed in Ghana, Niger, and Uganda suggests the following elements for such a list:

General:

- Does the village chief know who the VBW is, and what he or she is supposed to do? Does he understand the life cycle of Guinea worm and interventions against it? Does the chief believe the VBW is performing his/her duties satisfactorily?
- Are the geographic area, population, households to be covered of manageable size for one VBW?
- Are the VBW's other duties and/or volunteer status such that he or she can perform Guinea worm duties satisfactorily?

Active surveillance:

- Does the VBW have transportation (if needed)?
- Is the VBW's notebook, case register, or other form filled out correctly? Verify 3 or 4 entries with the patients themselves. What is the average time between emergence of the worm and when it was reported to the VBW for cases reported over the past month?
- On checking a few households, do villagers know their VBW? Do they know of any cases in the village the previous month that are not recorded in the VBW's book or form? Do they know of a reward for reporting of a case (if applicable)?

Case containment:

- Do all households checked have cloth filters? Are the filters in good condition, and do they appear to be used?
- Are all active cases seen properly bandaged? Do their recollection of worm emergence, report to the VBW, and beginning of control measures agree with those dates in the VBW's record? What is the average time between reporting of the worm and the beginning of control measures for cases reported over the past month?
- Does the VBW have adequate supplies (filters, contents of first aid kits, health education materials, forms) on hand?

Community mobilization/health education:

- Does the VBW understand the life cycle of Guinea worm and is the VBW able to teach this to others? Speak with members of a few households and ask how dracunculiasis is contracted and how it is prevented.
- Were any public talks or other Guinea worm activities conducted in this community in the past month? How and when were messages about Guinea worm disease conveyed to these villagers most recently (posters, songs, talks, schools, religious or political leaders, etc.)?
- If villagers are using pond water for drinking, observe which ponds are being used, determine if they were treated with Abate, and try to observe if villagers filter their water when they collect it.
- Have villagers dug a hand dug well? Do they cooperate with the use of Abate (if applicable)? Are all appropriate control measures in place in this village? If not, why not?

In summary, the basics of good supervision require that supervisors:

Take the time to do a proper visit (plan ahead and limit the number of localities per day). [Niger : 3-4 localities per day]

Look at the VBW's work (don't be satisfied with verbal responses only; the supervisor should verify with his or her own eyes whether cases are contained, filters distributed and used properly, etc.)

Listen carefully to the chief, VBW, and villagers

Emphasize the basics of prevention, case containment, and surveillance (review case definitions, key prevention messages, etc.)

GHANA: NORTHERN REGION REDUCES CASES BY 73% IN APRIL!



Ghana's Northern Region reported 191 cases of dracunculiasis in April 1998, compared to 720 cases in April 1997 -- a reduction of 73%! Northern Region, still the most endemic region in the country, reported reductions of 50 %, 61%, and 60% in January, February, and March 1998, respectively. Five of the country's 10 regions (Ashanti, Eastern, Greater Accra, Upper East, Western) reported zero indigenous cases in April.

UGANDA: KOTIDO DISTRICT REDUCES CASES BY 72% IN May!



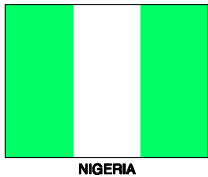
Uganda's Kotido District reported 153 cases of dracunculiasis in May 1998, compared to 489 cases in May 1997 -- a reduction of 69%! The 349 fewer cases this year for one district in one month is all the more remarkable since all Uganda reported 1,374 cases during all of 1997. Kotido District is now the highest endemic district remaining in Uganda, and May is the month of peak transmission. Reporting in May 1998 was much better than May 1997. The sharp reduction in cases apparently results from improved health education, including use of filters in that district during most of last year's peak transmission season, and increased use of Abate. UNICEF also helped provide 80 wells in the district. Dr. Johan P. Velema, who consulted with this program on behalf of Global 2000 in April, made the following insightful comment about

eradication efforts in Kotido and Moroto Districts: #Observations in the villages strongly suggest that, although the system to fight Guinea worm disease, i.e., village volunteers, sub-county supervisors, medical kits, monthly meetings, filters, Abate application, has been put in place, what is lacking on all levels is the attitude that >Guinea worm transmission should be stopped as of today= and that >fulfilling my task is a vital and indispensable contribution to achieving that aim=@

Uganda plans to hold a National Guinea Worm Eradication Day in Moroto District on July 21st. The main purpose of the Guinea Worm Day this year will be to spotlight the problem of dracunculiasis in the two main remaining endemic districts, Moroto and Kotido. This program also reported the importation of 36 cases from southern Sudan into refugee camps in Kitgum District in May (Table 2). Only 33% of the cases were contained, mostly because they were not detected within 24 hours of emergence of the worm, but only safe drinking water is available in the camps. (See Table 2.)

The coordinator of the Guinea Worm Eradication Program for Gulu District, Mr. Armstrong Opokwat, died in April. Mr. Armstrong had been with the program since 1992. Under his leadership, Gulu District progressed from 2,984 cases reported during the case search in 1991 to zero indigenous cases reported in 1997. Our thoughts and prayers are with his family.

NIGERIA HOLDS NATIONAL MEETING, SETS YEAR 2000 TARGET

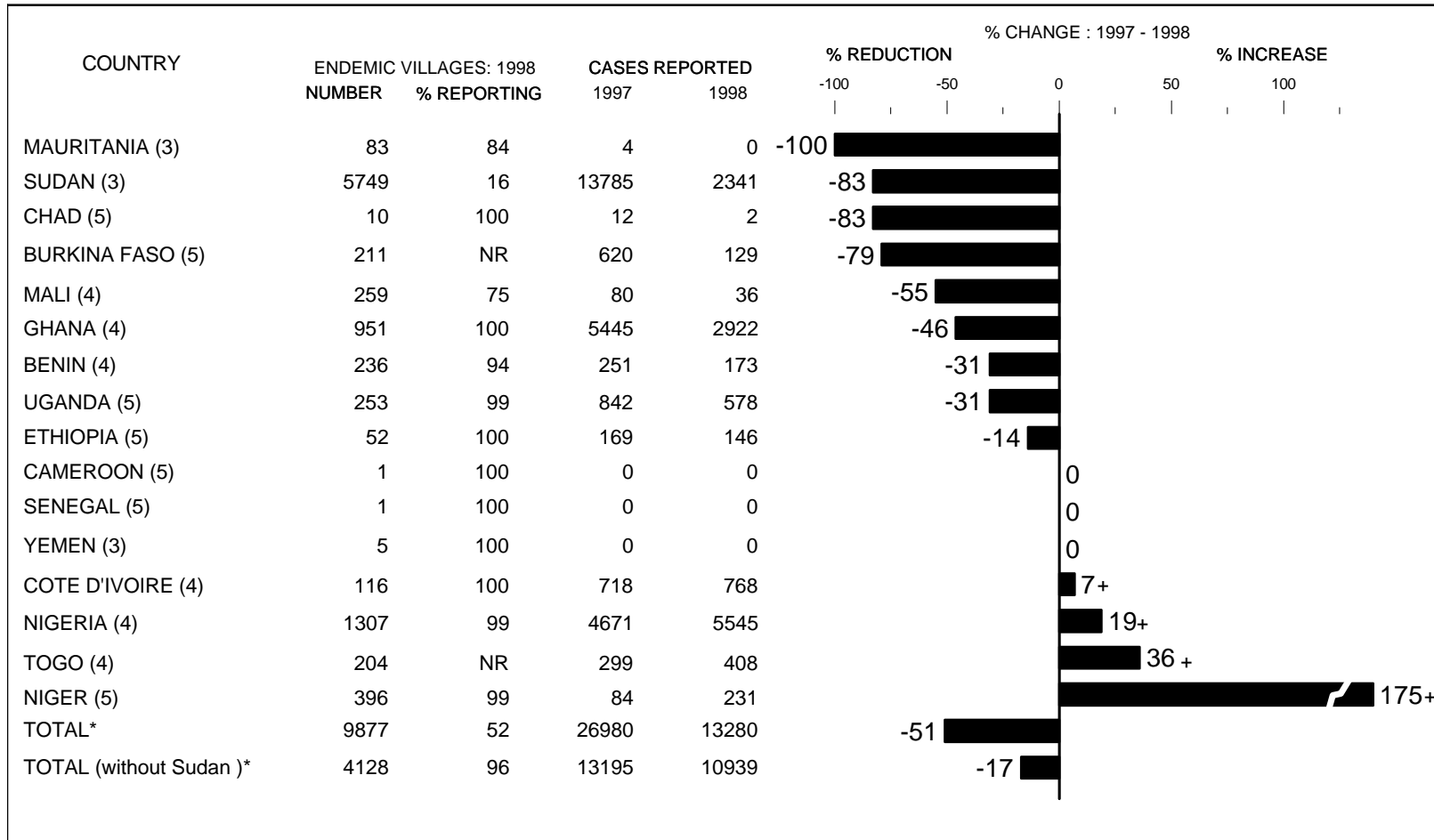


Nigeria's Guinea Worm Eradication Program (NIGEP) convened its first national review meeting in Abuja on May 27th-28th. The main purposes of the meeting were to review the status of dracunculiasis in the country, to identify problem areas and needs, and to map out an intensified strategy for eliminating all further cases from Nigeria by the year 2000. About 150 participants attended, including several state commissioners of health, Local Government Area (LGA) chairmen, chairmen of NIGEP state task forces, other NIGEP staff, and representatives of the media. Other participants included representatives of the Petroleum Task Force, UNICEF, World Health Organization, Global 2000 of The Carter Center, other NGOs, states, LGAs, agencies, and parastatal agencies. The meeting deliberated in six working groups, addressing funding, water supply, surveillance, other interventions, supervision, case containment strategy, and integration. Among the major problems identified were inadequate funding and political support, premature relaxation of intervention and surveillance measures, and inadequate mobilization and supervision at various levels. Specific recommendations were made to address these and other deficiencies, including the need to improve case containment and to accelerate provision and rehabilitation of safe drinking water sources in the remaining endemic communities. More attention is clearly needed to case containment, since Nigeria has reported an increase of 19% in cases for the first four months of 1998 (Figure 1), despite having claimed an overall rate of case containment of 82% in 1997. This year's increases in cases have been led by Northwest Zone (+86%) and Southwest Zone (+33%). Northeast and Southeast Zones= cases so far this year are -22% and -0.5%, respectively.

Following the national meeting, Dr. Ernesto Ruiz-Tiben and Mr. P. Craig Withers, Jr., who represented Carter Center headquarters at the meeting, spent two and a half weeks consulting with the programs in Northeast (Mr. Joshua Ologe) and Northwest (Prof. Luke Edungbola) Zones, respectively. Both zones were completing preparations for this year's peak transmission season. Dr. Jason Weisfeld also undertook a consultation to Southwest Zone (Prof. O.O. Kale) on behalf of Global 2000 for about two weeks in April-May.

In Oyo State, local ponds appeared to be the sources of transmission in 61% of high endemic communities, with many cases being among children. Moreover, almost one-third (31%) of high endemic communities were classified as urban, with seriously inadequate water supply. Recommendations included the need to reactivate the state Guinea Worm Task Force, expand supervision, adopt useful standards for case

**PERCENTAGE OF ENDEMIC VILLAGES REPORTING
AND PERCENTAGE CHANGE IN NUMBER OF CASES OF DRACUNCULIASIS
DURING 1997 AND 1998 *, BY COUNTRY**



* Provisional: includes 1 case imported into Cameroon from Nigeria in May
(3) Denotes number of months for which reports were received, e.g., Jan. - Mar., 1998
NR Not Reported

containment, and improve the supply of filters and Abate.

Drilling rigs have been deployed to Borwashe and Cha-Chile villages of Bama LGA, Borno State. Cha-Chile accounted for 11 of the 18 cases of dracunculiasis exported from Nigeria to Cameroon in 1997. The provision of safe sources of drinking water in Borwashe and Cha-Chile villages is a joint effort of the Borno State and Bama LGA authorities, residents of Borwashe and Cha-Chile villages, NIGEP/Global 2000, UNICEF, and WHO to eliminate transmission of dracunculiasis from these villages this year.

The NE Zone has began to implement a strategy to educate community leaders and members about the need for them to participate more effectively with efforts to halt transmission of dracunculiasis in their communities. LGA authorities and NIGEP are to educate District Heads (i.e., paramount chiefs) about the need to have all village chiefs in their jurisdiction understand why it is necessary to prohibit individuals with emerging Guinea worms from entering any source of drinking water, and the practice of *Ashekie* (i.e., the use of red hot iron to treat persons with abscesses caused by Guinea worms). The collaboration will require that District Heads enforce the rules, and NIGEP to provide health education, cloth filters, medical supplies with which to treat persons with Guinea worm lesions, and Abate to treat contaminated ponds.

The **A. G. Leventis Foundation** has announced a donation of 15 motorcycles to The Carter Center for the Guinea Worm Eradication Program in Nigeria.

Dracunculiasis Eradication Campaign

Reported Importations of Cases of Dracunculiasis: 1998

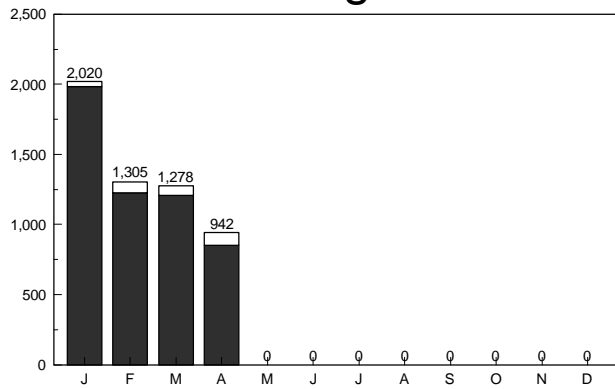
From	To	Cases			
		Month	Number	Contained	Notified*
Burkina Faso	Niger	January	1	1	1
Ghana	Benin	January	4	4	4
Libya??	Ghana	January	1	1	1
Nigeria	Cameroon	May	1	1	1
	Benin	January	1	1	?
		April	1	1	?
	Niger	February	2	2	?
		April	1	1	1
		May	1	?	?
Sudan	Uganda	March	5	5	5
		April	13	13	13
		May	37	12	37
Total			68	42	63

* Notified to country of origin through WHO.

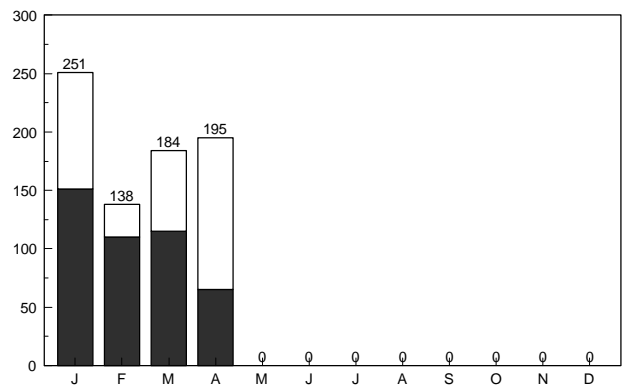
NUMBER OF CASES OF DRACUNCULIASIS REPORTED: 1998

(Number of cases reported that were contained are shaded black)

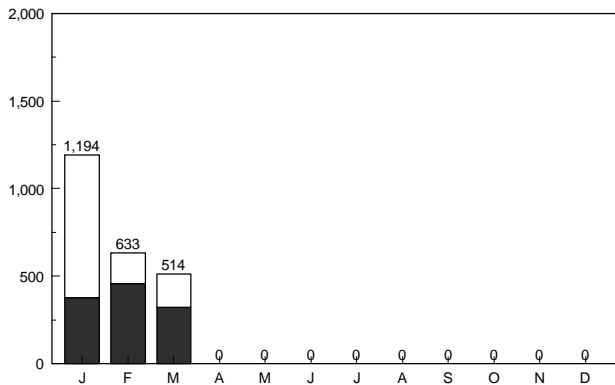
Nigeria



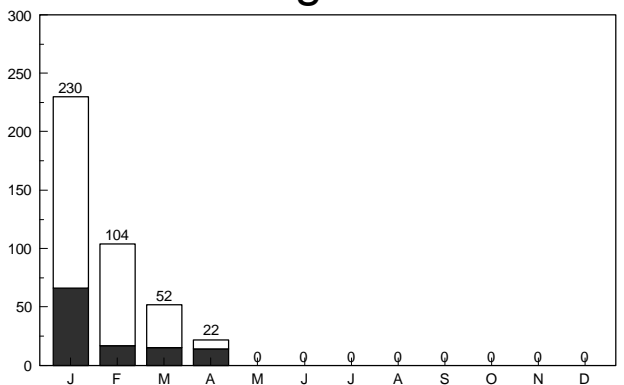
Côte d'Ivoire



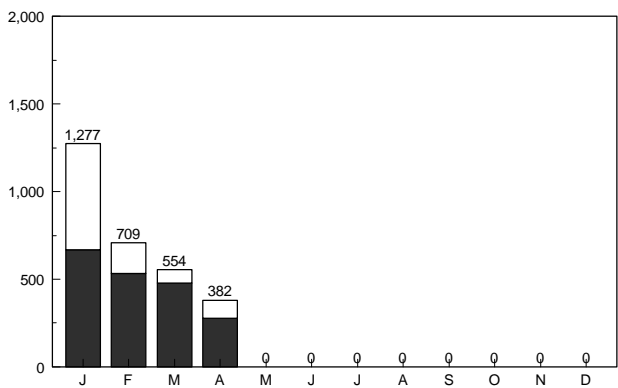
Sudan



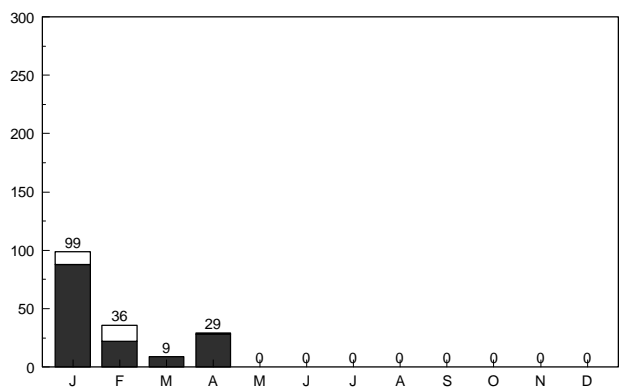
Togo



Ghana

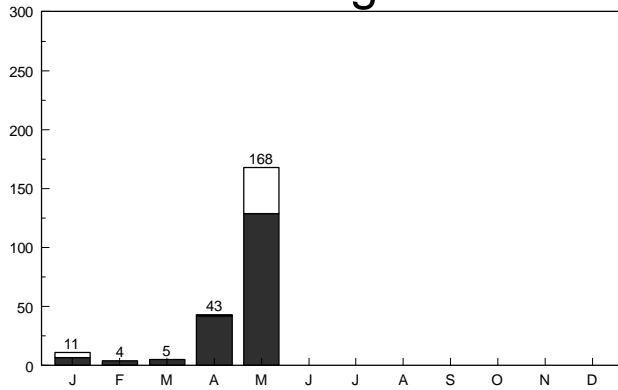


Benin

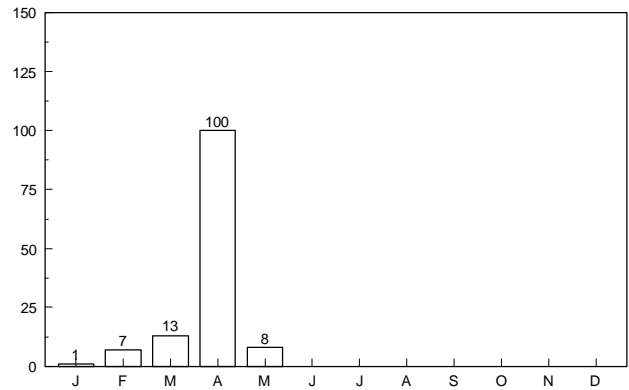


NUMBER OF CASES OF DRACUNCULIASIS REPORTED: 1998
 (Number of cases reported that were contained are shaded black)

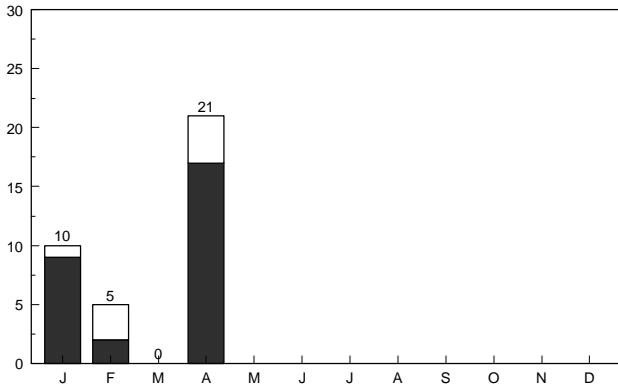
Niger



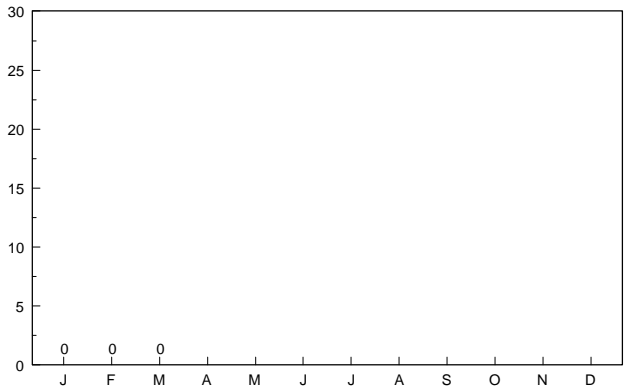
Burkina Faso



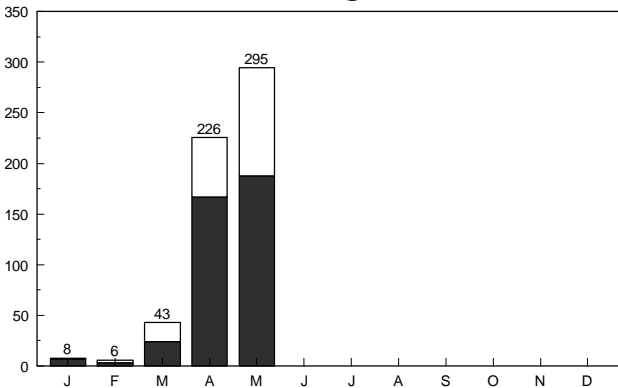
Mali



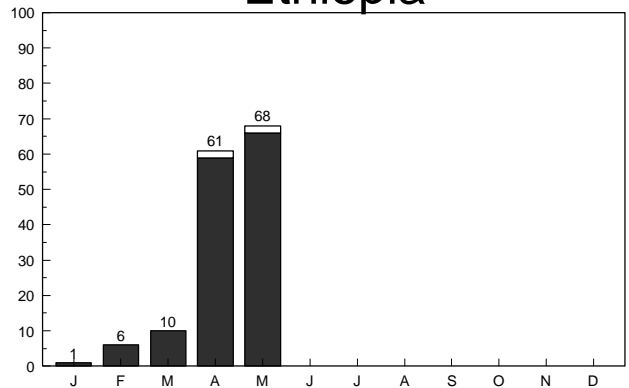
Mauritania



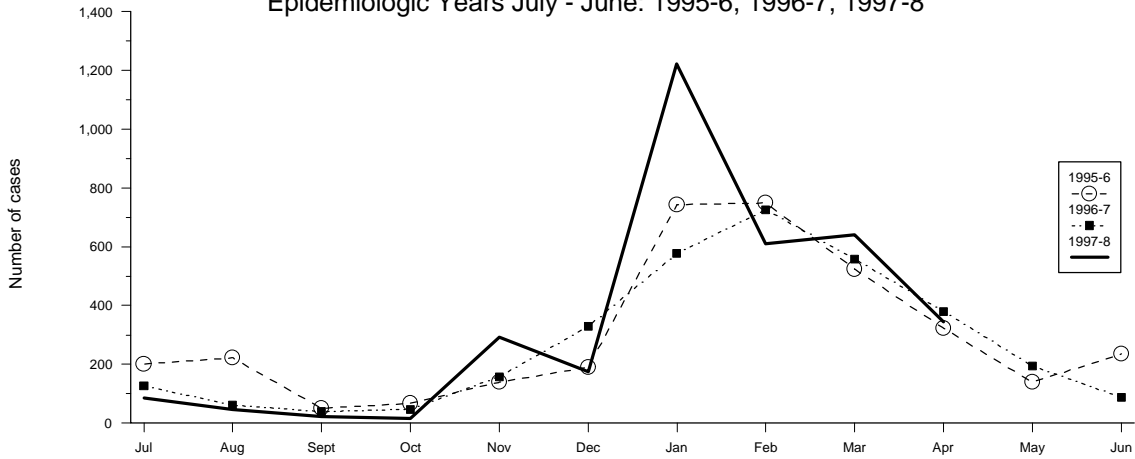
Uganda



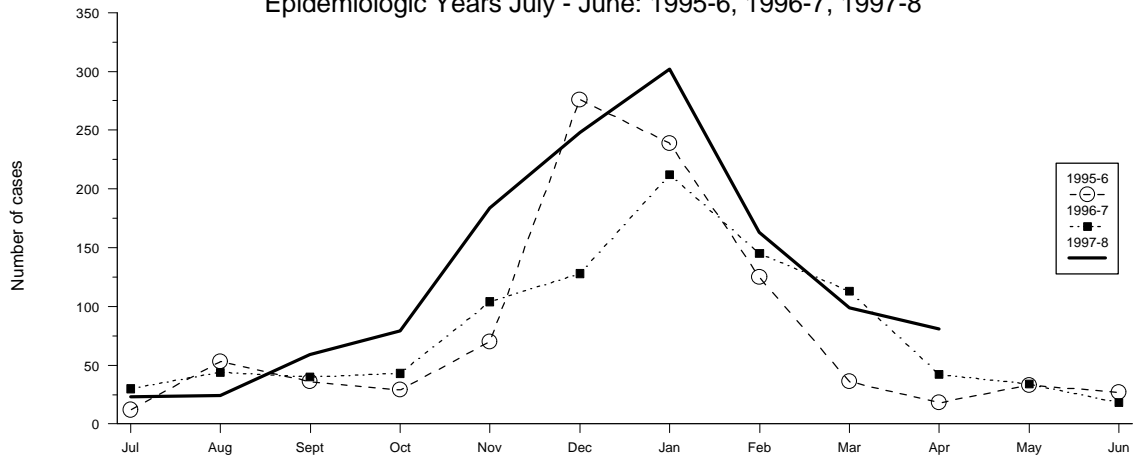
Ethiopia



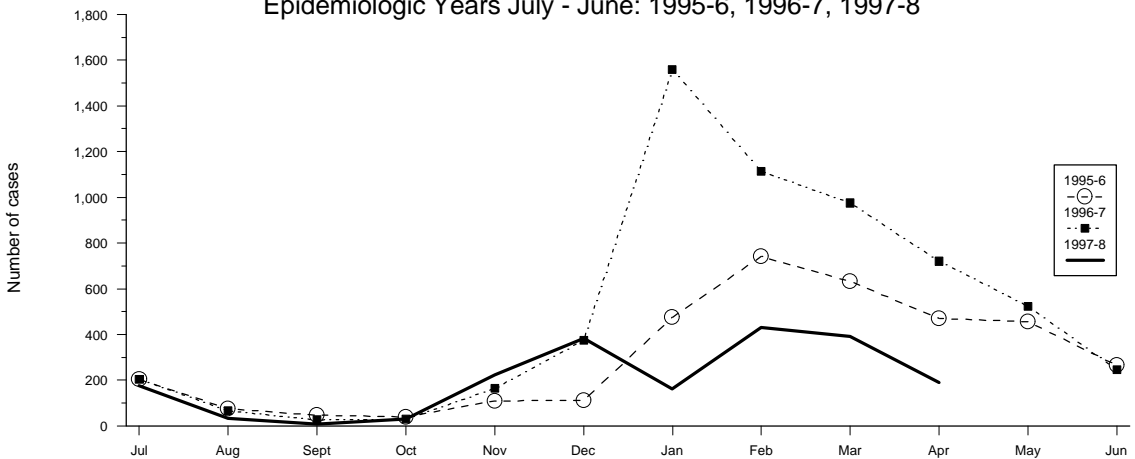
Nigeria Guinea Worm Eradication Program
 Number of cases of dracunculiasis reported from Enugu & Ebonyi States:
 Epidemiologic Years July - June: 1995-6, 1996-7, 1997-8



Nigeria Guinea Worm Eradication Program
 Number of cases of dracunculiasis reported from Oyo State:
 Epidemiologic Years July - June: 1995-6, 1996-7, 1997-8



Ghana Guinea Worm Eradication Program
 Number of cases of dracunculiasis reported from Northern Region:
 Epidemiologic Years July - June: 1995-6, 1996-7, 1997-8



UNICEF RECEIVES \$2.8 MILLION FOR GUINEA WORM FROM UN FOUNDATION



Dr. Jane Zucker has provided a copy of the press release describing a grant provided to UNICEF by the new United Nations Foundation that was established last year by CNN's Ted Turner. The Foundation announced in May a grant totaling US\$2.8 million to be provided to UNICEF over three years for Guinea worm eradication in Africa. This was the largest of six grants made by the Foundation to UNICEF. The first year of funding (\$964,000) from the grant will be allocated as follows (in addition to \$25,000 for regional coordinations):

Ghana: \$250,000 for Savelugu water supply

Burkina Faso: \$154,000 for disease control, \$ 170,000 for water supply

Mauritania: \$290,000 for disease control, \$75,000 for water supply

IN BRIEF:

Ethiopia has received \$39,600 from the World Health Organization for Guinea worm activities in 1998.

Health authorities in Libya have informed the World Health Organization that no evidence of dracunculiasis was found during a visit to Sebha by the staff of the national ministry on March 22nd-25th. In January 1998, Ghana reported having investigated a case of dracunculiasis in a man who reported having lived in ASabaha@, Libya from September 1996 through August 1997 (Guinea Worm Wrap-Up #76).

RECENT PUBLICATIONS



Velema JP, 1997. A time to eradicate and a time to control. [Letter], Trop Med & Int'l Hlth, 2:1107.

Watts S, 1998. An ancient scourge: the end of dracunculiasis in Egypt. Soc. Sci. Med., 46:811-819.

Watts S, 1998. Perceptions and priorities in disease eradication: dracunculiasis eradication in Africa. Soc. Sci. Med., 46:799-810.

*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.