



Date: May 19, 2000

From:



WHO Collaborating Center for
Research, Training and Eradication of Dracunculiasis

Subject:

GUINEA WORM WRAP-UP # 101

To: Addressees

Detect Every Case (within 24 hours), Contain Every Worm (immediately)!

**BILL & MELINDA
GATES foundation**

**GATES FOUNDATION GRANTS \$28.5 MILLION FOR
GUINEA WORM ERADICATION!!!**

At the 53rd World Health Assembly in Geneva, the Bill and Melinda Gates Foundation announced on May 16, 2000, a grant of \$28.5 million to help accelerate the eradication of dracunculiasis. The grant, which will be channeled through the World Bank Trust Fund for Guinea Worm Eradication, will be allocated as follows:

THE
CARTER CENTER



The World Bank



unicef

\$15 million to The Carter Center for the three-year period 2000-2002. The Carter Center has primary responsibility among the external partners to assist the remaining endemic countries (except Mauritania and Uganda, for which UNICEF has primary responsibility; and Central African Republic, for which WHO has primary responsibility) in eradicating this disease.

\$8.5 million to The World Bank. These funds will be used, by consensus agreement of The World Bank, The Carter Center, WHO, and UNICEF, to provide support for participation in this initiative by the Centers for Disease Control and Prevention (CDC), and the US Peace Corps; for contingencies; and for other expenditures related to Guinea worm eradication.

\$5 million to the World Health Organization, which has the responsibility for certification of eradication. WHO will also assume primary responsibility for assistance to countries in the pre-certification stage, including still-endemic countries that report 100 cases or less during a calendar year.

UNICEF (amount to be determined) will have primary responsibility among the external partners for helping all national programs to bring the water supply sector to bear in endemic villages, as quickly and effectively as possible. This includes helping programs to coordinate provision of new water supplies and rehabilitation of existing ones by all parties in endemic communities. UNICEF will continue to seek additional funds to support this expensive intervention. Priority in this will be given to the highest endemic countries, especially Nigeria and Ghana. UNICEF will continue to also support health education and social mobilization activities in endemic countries.

“The Gates Foundation once again has demonstrated an extraordinary commitment to improving health in the developing world”, said former President Jimmy Carter. “This grant will go a long way toward the final assault on Guinea worm disease, which has caused immense suffering among millions of people for thousands of years. I look forward to working with our partner organizations and with the governments of endemic countries, who must remain committed to making this disease just a painful memory”. In videotaped remarks viewed at the public announcement, President Carter said he hopes this important support by the Bill and Melinda Gates Foundation “will also help inspire both sides [in the civil war] in Sudan to make peace”. The director-general of WHO, Dr. Gro Brundtland, and World Bank president, Mr. James Wolfensohn, also thanked the Foundation in videotaped remarks at the announcement.

The announcement press conference was chaired by Dr. William Foege, advisor to the Gates Foundation. The four key agencies were represented at the announcement by Dr. Donald Hopkins, associate executive director of The Carter Center; Dr. David Heymann, executive director (Communicable Diseases) of WHO; Mr. Christopher Lovelace, director of health, nutrition and population at The World Bank; and Mr. David Alnwick, chief of health section, program division, UNICEF. Dr. Foege opened the press conference by stating that Guinea worm disease is an economic problem, a major cause of school absenteeism, and a quality of life issue. Dr. Heymann noted that WHO intends that Sudan should have stopped transmission of dracunculiasis by 2005. Mr. Lovelace underscored the economic importance of eradicating the disease, and Mr. Alnwick stressed UNICEF's special interest in strengthening provision of potable water, community mobilization, and computerized mapping in support of the campaign. Dr. Hopkins' remarks are reprinted elsewhere in this issue.

"The promises made in international meetings, the plans set out in partnership agreements mean nothing if they do not change what happens in towns and villages, and in people's homes." Dr. Gro Brundtland, WHO director general

NIGERIA'S CASES REDUCED BY 32% IN APRIL; NATIONAL SYMPOSIUM HELD IN ABUJA



Nigeria reports 754 cases of dracunculiasis for April 2000, which is a reduction of 32.2% from the 1,112 cases reported in April 1999. 368, or 49% of this April's cases were contained. Three operational zones reported reduction rates for April 2000 of -82% (NE), -81% (NW), and -81% (SW), while SE Zone reported an increase in cases of 28%. The cumulative reduction in Nigerian cases for January-April 2000 is -18% (4,177 cases vs. 5,094 cases). The increase in cases in SE Zone is mainly due to an upsurge in cases in Ohaukwu Local Government Area (LGA) of Ebonyi State, and Isi-Uzo LGA in Enugu State, both of which experienced significant under-reporting of cases in 1999, followed by increased supervision and active case searches in 2000. In contrast, Ebonyi LGA has achieved a reduction of -92% so far in 2000, a dramatic impact which was confirmed in a recent investigation. General (Dr.) Yakubu Gowon made follow up visits to Ogun and Oyo States from April 9-12. These were his third visits to those two states. The cumulative number of reported cases in Nigeria in 1998 - 2000 is illustrated in Figure 1. The highest endemic village of Niger State, Tungan Gana (171 cases in 1999) in Paikoro LGA, has received 5 borehole wells since General Gowon's visit in August 1999.

Nigeria held a National Symposium on Guinea Worm Eradication in Abuja on May 9, 2000. The theme of the symposium was "Guinea Worm Eradication: Let's End It Now!" The symposium was organized by the Nigerian Guinea Worm Eradication Program and the Federal Ministry of Health (FMOH), with funding by the FMOH, Global 2000/The Carter Center, and UNICEF. In an address read on his behalf by the permanent secretary of the ministry of health, Vice President Atiku Abubakar announced that the head of state had recently released over 5 billion naira (~US\$50 million) for safe water supply to rural communities, and that Guinea worm endemic villages would be given priority attention. He highlighted the impoverishing nature of the disease; hence the Kanuri term for Guinea worm disease *Ngudi*, "The Impoverisher". In his address on the role of advocacy and community mobilization, General (Dr.) Yakubu Gowon challenged everyone to be "movers of resources" for the last lap of the eradication effort. Professor Luke Edungbola gave a lively and graphic presentation on "The Burden of Guinea Worm Disease", in which he elicited an emotional response from many in attendance, as he graphically illustrated the disease and its health implications, using pictures and actual patients. Other participants included the executive governor of Ebonyi State, the honorable commissioners for health of Ebonyi and Zamfara States, a representative of the executive governor of Oyo State, and representatives of The Carter Center (Global 2000), WHO and UNICEF. The master of ceremony for the occasion was Ms. Onyeka Owenu, a renowned Nigerian singer. The national coordinator, Dr. K.A. Ojodu, welcomed the participants and acknowledged the dignitaries at the high table. Other activities included a Guinea worm drama by a cultural troupe, and an exhibition of intervention activities.

TOGO INTENSIFIES ATTACK ON GUINEA WORM IN OGOU DISTRICT

In 1999, Togo reported the sixth highest total number of cases (1,585) among the remaining endemic countries, with 646 of those cases (41%) reported from only one district: Ogoou (Map 1). Thirteen of Togo's 28 districts are already Guinea worm-free. Of the 39 villages in Ogoou which had one or more cases in 1999, as of May 2000 90% (35) are using abate, 62% (24) had full coverage of all households with cloth filters, and 31% (12) had at least one safe source of drinking water, with only 13% (5) having adequate safe water. Only a few were receiving regular health education and community mobilization. Togo exported more cases of dracunculiasis in 1999 than any other endemic country (Figure 3).

Following a visit in early May by the national coordinator, Mr. Ignace Amegbo; the associate Peace Corps Director, Mr. Tchao Bamaze, and Carter Center associate executive director Dr. Donald Hopkins, the program is taking several steps to improve

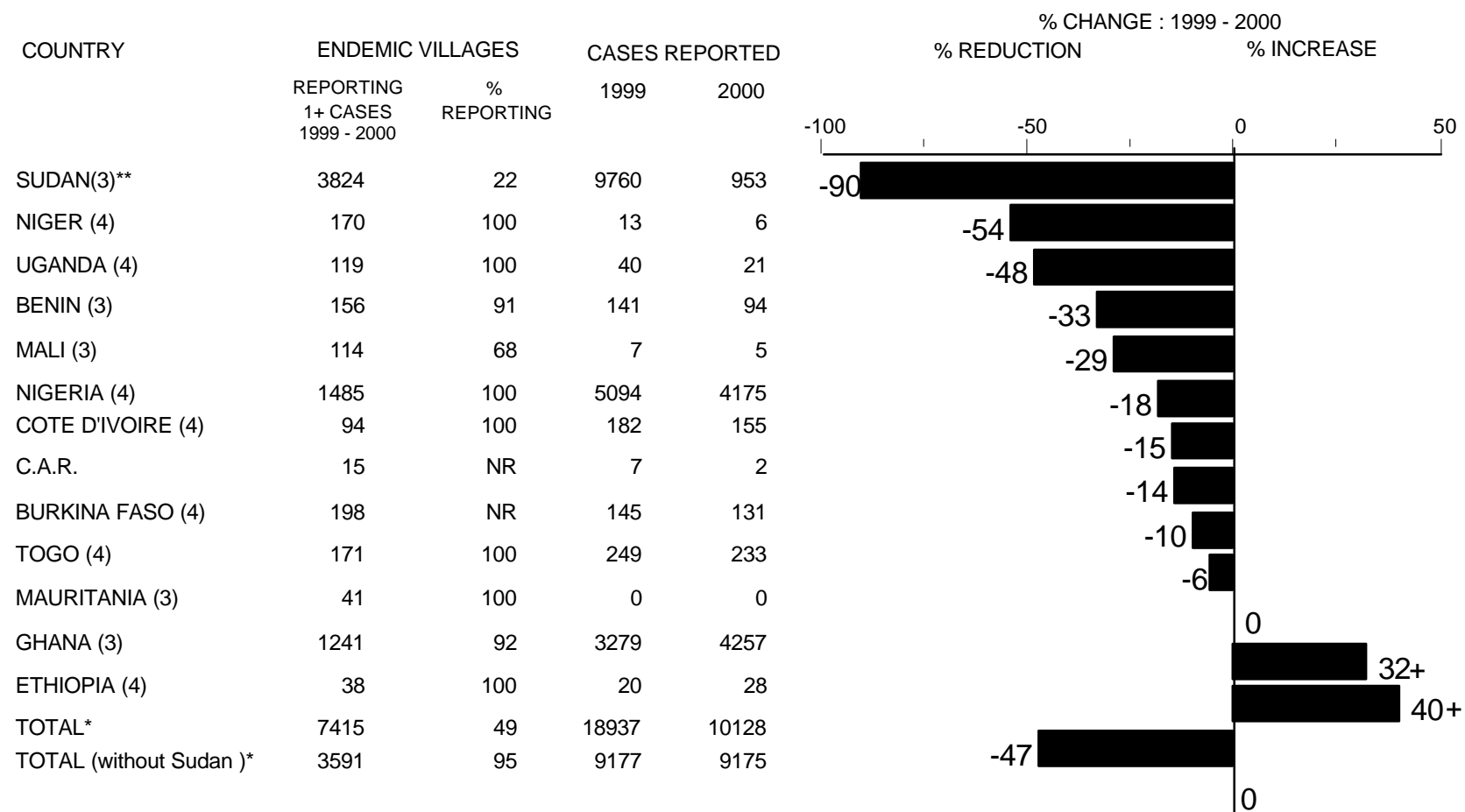
Table 1

Number of cases contained and number reported by month during 2000*
(Countries arranged in descending order of cases in 1999)

COUNTRY	NUMBER OF CASES CONTAINED / NUMBER OF CASES REPORTED													%
	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL*	
SUDAN	211 / 805	51 / 70	64 / 78	/	/	/	/	/	/	/	/	/	326 / 953	34
NIGERIA	707 / 1263	455 / 1021	651 / 1137	368 / 754	/	/	/	/	/	/	/	/	2181 / 4175	52
GHANA	1737 / 1896	1214 / 1523	706 / 902	/	/	/	/	/	/	/	/	/	3657 / 4321	85
BURKINA FASO	1 / 6	4 / 6	22 / 28	39 / 91	/	/	/	/	/	/	/	/	66 / 131	
NIGER	1 / 1	2 / 2	0 / 0	3 / 3	/	/	/	/	/	/	/	/	6 / 6	100
TOGO	63 / 89	40 / 54	39 / 56	16 / 34	/	/	/	/	/	/	/	/	158 / 233	68
BENIN	40 / 53	20 / 29	10 / 16	6 / 6	/	/	/	/	/	/	/	/	76 / 104	73
COTE D'IVOIRE	21 / 25	55 / 60	6 / 33	8 / 38	/	/	/	/	/	/	/	/	90 / 156	58
MALI	5 / 5	0 / 0	0 / 0	/	/	/	/	/	/	/	/	/	5 / 5	100
UGANDA	3 / 4	2 / 2	4 / 4	11 / 11	/	/	/	/	/	/	/	/	20 / 21	95
MAURITANIA	0 / 0	0 / 0	0 / 0	/	/	/	/	/	/	/	/	/	0 / 0	
ETHIOPIA	0 / 0	0 / 0	2 / 2	26 / 26	/	/	/	/	/	/	/	/	28 / 28	100
C.A.R.	/ 4	/ 2	/	/	/	/	/	/	/	/	/	/	0 / 6	0
CHAD	0 / 0	0 / 0	0 / 0	/	/	/	/	/	/	/	/	/	0 / 0	
CAMEROON	/	/	/	/	/	/	/	/	/	/	/	/	0 / 0	
TOTAL*	2789 / 4151	1843 / 2769	1504 / 2256	477 / 963	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	6613 / 10139	65
% CONTAINED	67	67	67	50									65	

* Provisional

Percentage of Endemic Villages Reporting and Percentage Change in Number of Indigenous Cases of Dracunculiasis During 1999 and 2000*, by Country

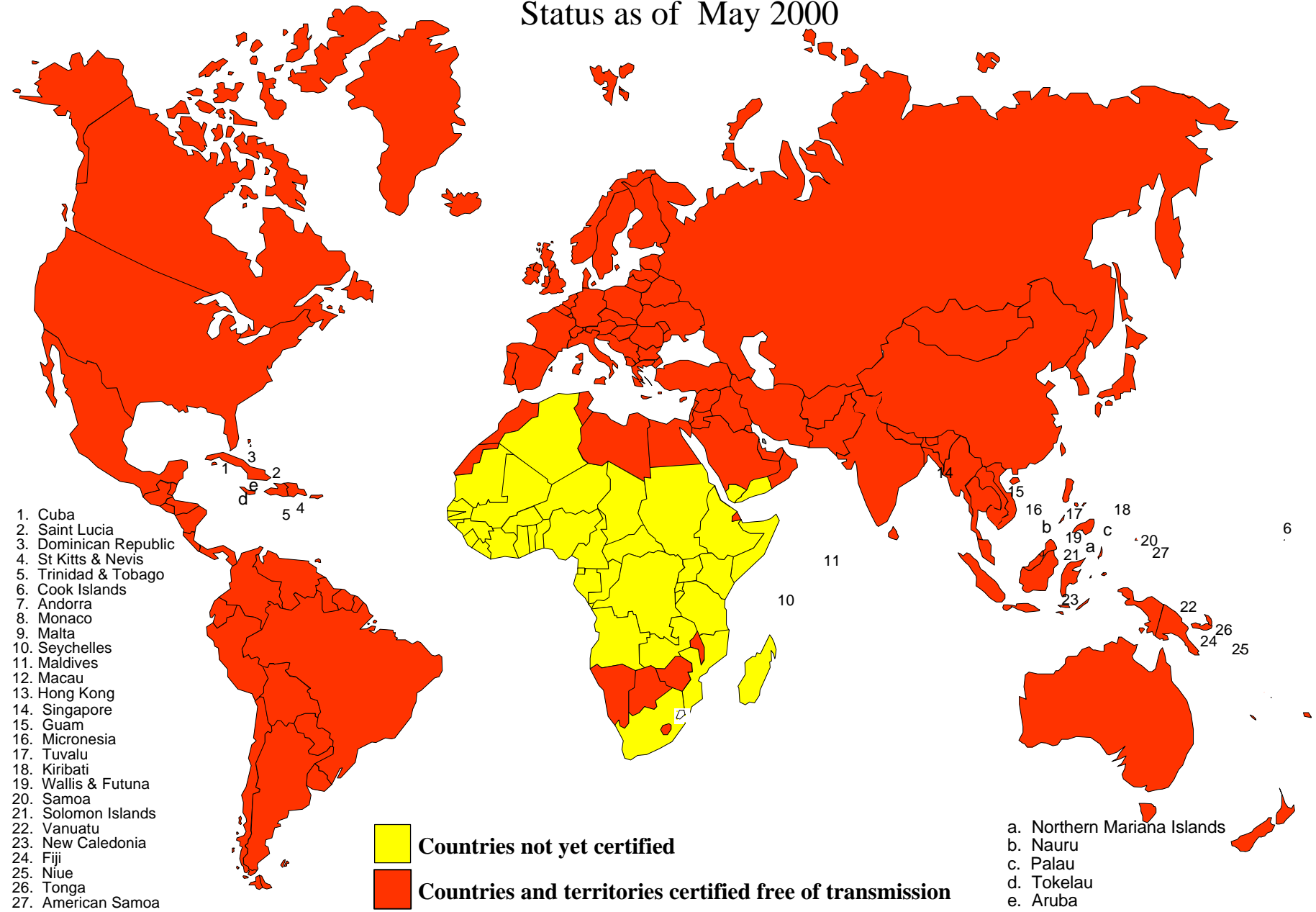


* provisional

** 2,026 (28%) of 7,290 endemic villages are not accessible to the program

Certification of Dracunculiasis Eradication

Status as of May 2000



interventions in that key district. Priority is being given to getting cloth filters in all households of all endemic villages, and secondly, to intensifying health education and community mobilization. A line-listing was prepared of endemic villages in declining order of endemicity (as of 1999). The program has just received material (courtesy of UNICEF) to prepare enough filters for attaining 100% coverage of all households in endemic villages. UNICEF will also support presentation of a Guinea worm drama in 20 endemic villages over the next few months, and has purchased 1,000 t-shirts. Peace Corps will reprint copies of handbooks for village volunteers, and has also purchased and distributed 1,000 t-shirts with Guinea worm messages. The program plans to hold a “*Conseil de Guerre*”, to publicly declare war on the last Guinea worms, in Ogou in June. Peace Corps Volunteers will hold a “Worm Week”, Togo’s first, in 15 endemic villages (and a “market strategy” in one large market) in late July with support from Peace Corps, the ministry of health, and The Carter Center (Global 2000). WHO has been requested to provide 10,000 copies of the Guinea worm comic book for use in the schools. The Carter Center and Health and Development International (HDI) are purchasing 5,000 posters. The Carter Center will also provide a Togolese version of the Guinea worm cloth as another incentive for village volunteers. UNICEF plans to help rehabilitate about 30 wells in endemic villages of Ogou District. Mr. Amegbo participated in a report on Togo’s Guinea Worm Eradication Program that was broadcast on national television on May 5.

“Hope is not an intervention.” Don Hopkins

CARTER CENTER AWARDS FOR FIRST YEAR WITH ZERO CASES



President and Mrs. Jimmy Carter will host a ceremony at The Carter Center on July 18, 2000 to present awards to governments of the first seven recently endemic countries that have reported zero indigenous cases of dracunculiasis for at least one year since the global eradication campaign began in 1980. Pakistan, Kenya, India, Senegal, Yemen, Cameroon and Chad will be represented by their ambassadors to the United States. The awards were commissioned with the support of Mr. John Moores, a member of The Carter Center’s Board of Trustees. A larger, related distinctive work of art, which is being inscribed with the names of each endemic country and the year in which they interrupted transmission, will be unveiled at the ceremony and displayed prominently at The Carter Center thereafter. The ceremony will be broadcast the next day by the U.S. Information Service via satellite to the seven countries receiving awards.

IN BRIEF:

CNN and CNN International broadcasted a news item featuring Guinea worm eradication as part of their “Inside Africa” program on Saturday, May 20, 2000.

Benin. UNICEF has begun drilling 20 wells in endemic villages of Zou Department. Unfortunately the terrain in a key endemic village, Allee (with 98 cases this was the highest endemic village in Benin in 1998; reduced by 92% to only 6 cases in 1999), was not suitable for a borehole well.

Burkina Faso, Cote d’Ivoire & Ghana. Representatives from these three countries met in Bouna, Cote d’Ivoire in May 2000 to discuss Guinea worm eradication activities in border areas. The director of the cabinet of the Ivoirian minister of health participated in the first day of the meeting. Representatives included a delegation of fifteen from Burkina Faso and 4 from Ghana, Dr. Alhousseini Maiga of WHO/Burkina Faso, as well as representatives of UNICEF/Burkina Faso, UNICEF/Cote d’Ivoire and GTZ Burkina Faso. Presentations were made and discussed by each of the national programs and border health districts. A list of recommendations was agreed to at the conclusion of the meeting.

Ethiopia. During a supervisory visit to Gambella Region in late April, personnel from the national secretariat of the program discovered an outbreak of 30 suspected cases (18 of whom had emerging worms), mostly among teenage boys, in one village (Tekodi) in Abobo Woreda. All of the suspected cases were placed in a Guinea worm station under strict observation.

Niger. The head of state, President Tandja Mamadou, has indicated his plans to visit an endemic village during the peak transmission season for Guinea worm disease in the next few months. U.S. Peace Corps Volunteers (PCVs) and Japanese Overseas Volunteers (JOCVs) conducted a “Worm Week”, including use of a theater troupe and 20 teams of PVCs, JOCVs, and Nigerien counterparts, in Tera District of Tillaberi Region May 1 – 8. The teams reached over 150 villages and hamelets in the most endemic parts of Dargol and Gorgoul cantons. They distributed about 4500 filters and spoke to over 5300 villagers, many of them among nomadic populations. Financial support was provided by The Carter Center (Global 2000). Radio messages on

Figure 3

Distribution by Country of Origin of 83 cases of Dracunculiasis Exported to Other Countries During 1999

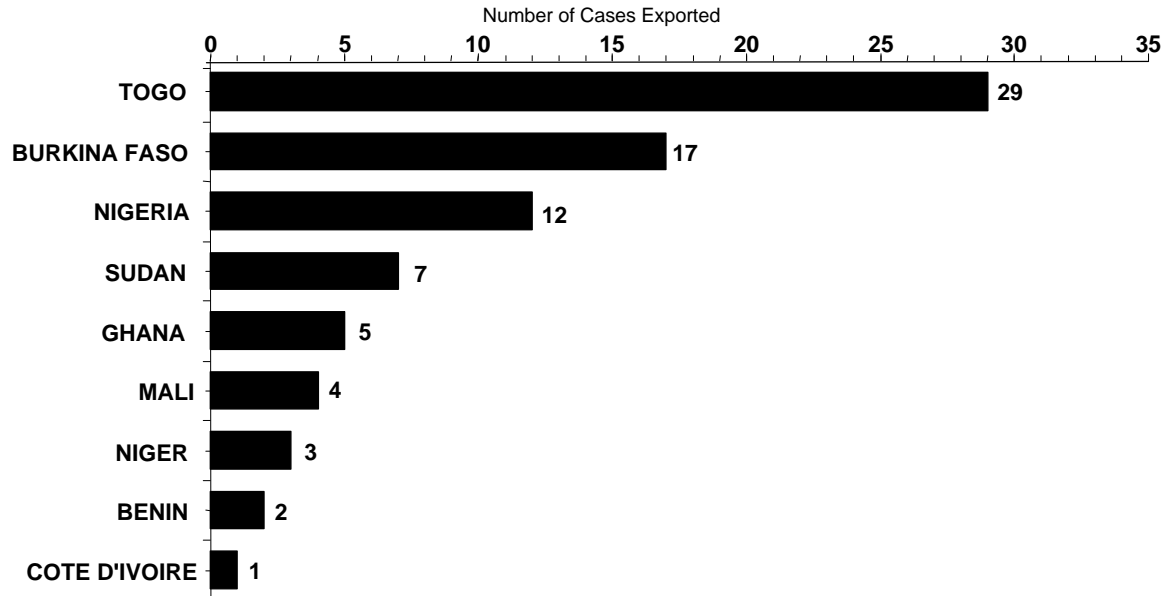
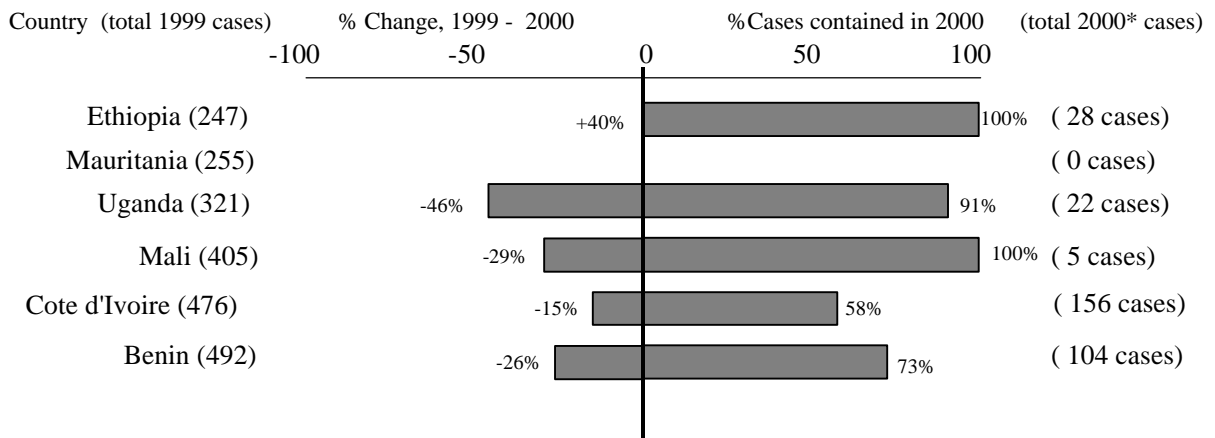


Figure 4

% Reduction in Dracunculiasis Cases from 1999 and % Cases Contained in 2000* for Six Least Endemic Countries



•Provisional

Ideally, both bars should be as close to 100% as possible. The % reduction in cases measures the effectiveness of work in 1999. The % cases contained, if true, measures the quality of work in 2000. All six of these countries should be going all out to stop transmission in 2000. Benin and Cote d'Ivoire need to contain larger proportions of their new cases.

Remarks by Dr. Donald Hopkins, Associate Executive Director of the Carter Center, at the press briefing for announcing the Gates Foundation grant for Guinea worm eradication. Geneva, May 16, 2000.

I am pleased to represent The Carter Center and President and Mrs. Carter on this important occasion. I wish to echo the words of President Carter, by thanking the Bill and Melinda Gates Foundation for its willingness to help some of the most forgotten people of the world in their struggle to free themselves from dracunculiasis.

The Global 2000 Program of The Carter Center intends to use these funds granted by the Bill and Melinda Gates Foundation to continue spearheading the campaign to eradicate dracunculiasis. As before, we shall work in close cooperation with the Centers for Disease Control and Prevention (CDC), governments of the remaining endemic countries in Africa, UNICEF, WHO, The World Bank, and many others. The clear division of labor among us will help ensure that these grants will have maximal impact and hasten the end of dracunculiasis.

As you all know, we have achieved much success already. Cases of dracunculiasis have been reduced by over 97% since 1986, from more than 3 million cases to less than 100,000, and the number of endemic countries has been reduced from 20 to 13. Asia is now completely free of the parasite. But this is not a control program, it is an eradication program, and "almost eradication" does not count. No formerly endemic region is safe until all areas are Guinea worm-free. Our entire investment up to now is at risk until the last Guinea worm is dead.

These funds represent most of what we estimate we need in order to help the remaining affected countries outside of Sudan to eradicate this disease within the next 2-3 years, in addition to the funds we have raised already. This will help us to provide cloth filters, other commodities, training, technical assistance, transportation, support for social mobilization, and other support for endemic countries. These funds will also help us to help Sudanese health workers to control dracunculiasis in accessible areas of that war-torn nation. With more than two-thirds of the world's remaining cases, however, Sudan will require even more help than this in order to achieve eradication once peace is restored in that country. But our foremost priority now is to help governments of the other 12 endemic countries to finish the job of stopping transmission of dracunculiasis.

Among the many collateral benefits of eradicating dracunculiasis are improved agricultural production; better school attendance, child care and infant nutrition; establishment of a network of community-based volunteers for reporting disease and conducting health education and local mobilization; and provision of clean drinking water to hundreds of communities. But it is impossible for me to really convey the tangible and intangible improvements in lives and hopes of villagers that this occasion represents. Dracunculiasis eradication is real development, at the grass roots level, affecting people who need and deserve our help.

I have been working on this campaign for almost 20 years. This long struggle has suffered at various times from inadequate funding, political and ethnic strife, and other distractions. Even as late as 1990, only four endemic countries were implementing national Guinea Worm Eradication Programs. I am glad to see this giant step towards completing the eradication of this ancient scourge.

Finally, I would also like to thank the many other donors and supporters who enabled us to get this far. They include thousands of village volunteers, governments of the endemic countries, governments of some wealthier countries, development agencies (including the three partners represented here), some private individuals, and three private sector companies: the E.I. DuPont Corporation, Precision Fabrics Group, and American Home Products (former American Cyanamid). They also include General Amadou Toumani Toure of Mali and General (Dr.) Yakubu Gowon of Nigeria, two African former heads of state who have also made this cause their own.

Guinea worm disease have begun at national level (including Tera) and in Zinder Region. The program has also just received 6,000 health education posters.

Sudan. The annual Program Review will be held September 25-26, 2000 in Nairobi, Kenya.

DEFINITION OF CASE CONTAINMENT

A case of Guinea worm disease is contained if all of the following conditions are met:

1. The patient is detected before or within 24 hours of worm emergence; and
2. The patient has not entered any water source since the worm emerged; and
3. The village volunteer has properly managed the case, by cleaning and bandaging until the worm is fully removed, and by giving health education to discourage the patient from contaminating any water source (if two or more emerging worms are present, the case is not contained until the last worm is pulled out); and
4. The case is verified by a supervisor within 7 days of worm emergence (to confirm that the case is Guinea worm, and that it has been properly contained).

“Scrutiny of the remaining cases revealed seven teachers. This came as a shock to health workers who have been spreading the gospel for over ten years. If teachers were among the infected, how could they expect their message to be accepted by the general populace? We re-interviewed all the teachers, searching for a possible connection...The interviews had a positive aspect in recruiting seven more volunteers into the program. Each teacher had their own story which they carried to their students in the form of lessons. Seven more people now spread the gospel of eradication.” From the report of a consultant to the program in Atebubu District, Ghana.

RECENT PUBLICATIONS

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Hopkins DR, Ruiz-Tiben E, Ruebush TK, Diallo N, Agle A, Withers PC Jr., 2000. Dracunculiasis eradication: delayed, not denied. Am J Trop Med Hyg, 62:163-168.

WHO, 2000. Dracunculiasis eradication-certification of absence of transmission. Wkly Epidemiol Rec. 75:77-79.

WHO, 2000. Dracunculiasis-global surveillance summary, 1999. Wkly Epidemiol Rec, 75:146-152.

*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. Daniel Colley, Acting 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.

The GW Wrap-Up is also available on the web at http://www.cdc.gov/ncidod/dpd/list_drc.htm.



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