

**Memorandum**

Date March 30, 1987

From WHO Collaborating Center for  
Research, Training, and Control of Dracunculiasis

Subject GUINEAWORM WRAP-UP #15

To Addressees

**U.S. House of Representatives**

## SELECT COMMITTEE ON HUNGER

## HOUSE COMMITTEE HOLDS HEARINGS ON DRACUNCULIASIS

The International Task Force of the Select Committee on Hunger of the U.S. House of Representatives held hearings on the problem of dracunculiasis in Washington, DC, on March 17, 1987. The hearing, which was attended by five members of the Select Committee, heard testimony by Dr. Peter Bourne of Global Water, Inc.; Dr. A.O. Lucas of the Carnegie Corporation of New York; Dr. William Foege of the Carter Presidential Center; Dr. Donald Hopkins of the Centers for Disease Control (CDC); and Dr. Kenneth Bart of the Agency for International Development (AID). The purpose of the hearing was to focus more attention on the crippling disease and to explore options for a greater U.S. Government role in the international campaign to eradicate dracunculiasis.

Among highlights of the two-hour long hearing was the personal testimony submitted for the record by former U.S. President Jimmy Carter. Drs. Lucas and Foege provided moving testimony of their personal experiences with the disease in Nigeria. Also, AID described its future two-pronged approach to reduce dracunculiasis:

"Wherever there are ongoing water and sanitation projects--whether funded by AID or others--we are prepared to provide technical assistance to improve the impact of those programs on the control of guineaworm disease. Second, AID stands ready to help with surveillance of existing control projects, epidemiological mapping of the disease, and technical support for countries to develop national plans for the control of guineaworm disease."

Congressman Tony P. Hall, Chairman of the International Task Force of the Select Committee, emphasized the relevance of clean drinking water to Child Survival, and the interrelationship of guineaworm, agriculture, and water supply. He stated the committee's intention to monitor progress on this issue.

The full printed report of the hearing will not be available for several weeks. Copies of that report may be obtained by writing:

Select Committee on Hunger  
U.S. House of Representatives  
Room 507, House Annex II  
Washington, DC 20515

ATTN: Printing Editor



## NATIONAL ACTIVITIES

### BENIN

An AID-assisted rural water project got underway in January 1987 in parts of Zou and Atacora provinces, covering approximately 200,000 people living in 200 villages. This project is a collaborative effort of the national government, AID, and several other international agencies. Nine U.S. Peace Corps volunteers are assigned to the project in northern Zou province, the area of Benin most seriously affected by dracunculiasis.

A recent sample survey of the Dassa area of Zou province (total population 800,000) found that "25% of the inhabitants were affected by guineaworm and the economic impact of the debilitating parasite is considered severe." One of the main goals of the project is "to significantly reduce the incidence of guineaworm in the project area." A strong health education component is included in the plan.

### BURKINA FASO

The Ministry of Health is planning a national meeting, among government officials and donor organizations, on guineaworm disease in order to promote the Plan of Action for eliminating the disease. This meeting is expected to be held in the next few months. The actual annual incidence of dracunculiasis in Burkina Faso is estimated to be between 65,000 and 115,000 cases.

### CAMEROON

The Ministry of Health has allocated some funds and is putting together an action plan for the elimination of guineaworm in the Mayo Sava Division of Mandara Mountain Region of northern Cameroon. The Plan of Action calls for:

- Phase One (1987-1990): Initiate guineaworm control activities in the Division of Mayo Sava. The pilot program will include health education, supply of potable water (by local water projects) to affected villages, and chemical treatment of water supply with

temephos (abate) in villages inaccessible to drilling teams. In other areas, the MOH will undertake an active surveillance program to define precisely where the next control efforts will be directed. Cost of Phase I: US \$150-200,000, excluding outside consultant costs, which could be provided through the VBC/AID program.

- Phase Two (1990-1993): Extend control program to all other endemic areas in Cameroon which are identified through active surveillance of Phase I. Cost of Phase II is dependent upon the actual extent of guineaworm disease; probably an additional US \$200,000. Total cost of guineaworm disease control program: approximately US \$400,000 over six to seven years.

#### GHANA

Two consultants visited Ghana on behalf of the Global 2000 project of the Carter Presidential Center in February 1987. A follow up consultation will be conducted to work with the Ministry of Health in completing a national Plan of Action for dracunculiasis elimination and to help plan a national campaign. In 1985, the last year for which complete reports are available, 4,060 cases of dracunculiasis were officially reported from all nine regions. There are believed to be at least 100 cases occurring for each officially reported case.

A recent report showed that 25% of the student population at the Ghana Secondary School at Tamale were unable to attend classes as a result of an outbreak of guineaworm disease. The headmaster of the school said that the disease was caused by drinking water from a well in the school and that a fuel tanker is now being converted into a water tanker to ensure regular supply of treated water.

#### NIGERIA

On December 20, 1986, the program for the eradication of guineaworm disease in Anambra State of Nigeria was launched by the military governor of the state, Group Captain Emeka Omeruah, assisted by the Hon. Federal Minister of Health, Prof. Olikoye Ransome Kuti and the State Commissioner for Health, Dr. A.B.C. Nwosu. The ceremony was attended by many dignitaries from all walks of life, as well as hundreds of victims of guineaworm drawn mainly from the Local Government Area (LGA) of Abakaliki, which is one of the areas where the disease is most prevalent in Nigeria. The Anambra guineaworm eradication program is receiving support from many sources which includes federal, state, and local governments, as well as UNICEF and WHO.

The first group of National Youth Service Corps (NYSC) personnel to be enlisted into the Nigerian national guineaworm eradication program are expected to start their training in July 1987. They will be deployed to

serve in teams of four to five in 20 of the LGAs of the country where a national primary health care program has already been established.

#### PAKISTAN

A National Plan of Action for the Elimination of Dracunculiasis in Pakistan has been drafted. Preliminary plans include the following:

- Two guineaworm elimination projects will begin March 1987 in the Bannu NWFP regions and in the Sind area of Thariparker/Sanghar. Other projects will be undertaken when other areas are identified.
- A national meeting on guineaworm control will be held in early April 1987 to formulate appropriate strategy and plan of action for a nationwide organized survey of guineaworm disease.
- A nationwide intensive search to assess endemicity of the disease will be carried out in all regions of the country for a period of one week in June 1987.
- A second national meeting will be held in early July 1987 where the results of the national survey will be discussed and the final Plan of Action for guineaworm eradication will be devised. Priority areas will be selected in accordance with the endemic pattern of the disease.

#### POTENTIAL SOURCES OF FUNDING



is a 35-year old developmental organization that spends about US \$2.8 million a year on programs in 20 countries in Africa, Asia, and Latin America. The international self-help non-sectarian organization, which accepts no government funding, stimulates the participation of village-people, with their own ingenuity and determination, as the major resource in the development process. Before starting a project, World Neighbors (WN) spends months getting to know the rural villagers and searching for the natural leaders to inspire and encourage their neighbors. One such project is in the village of Kati, Togo, where one out of six people suffer from guineaworm. According to one WN health adviser, "Building on where they were, we helped them discover the connection between guineaworm and their source of water. When people realized that they were getting the disease from the stagnant ponds from which they fetched water, they were motivated to do something about it. So the villagers learned to filter water through a cloth and then collected money to install hand pumps. Since then, the incidence of guineaworm has dropped 86%." For further information about this organization, write to: World Neighbors, 5116 North Portland Ave., Oklahoma City, OK 73112.



USA for Africa Foundation has announced a Request for Food Security and Health Care Proposals. Health care programs should focus on such areas as: nutrition, primary health care training, maternal and child health, disease control and prevention, water and sanitation, and community health care development. Proposals should highlight human resources development and indigenous capacity-building. Priority will be given to projects based in Angola, Burkina Faso, Chad, Ethiopia, Mali, Mauritania, Mozambique, Niger, Senegal, and Sudan. However, proposals involving other African countries may also be considered. Under the "Long Term Disease Control and Prevention" category, the Foundation is seeking proposals that provide innovative technologies or programs for the prevention of several endemic nutritional deficiencies or infectious diseases, including, specifically, guineaworm. All proposed interventions should include an evaluation of effectiveness. Proposals should support the goals of existing government or WHO. Funding will be limited to US \$200,000 per proposal (maximum of US \$600,000 for a three-year project). USA for Africa does not generally fund overhead or equipment costs. The Medical Task Force meets quarterly to consider proposals. All submissions should be sent to:

Dr. Irwin Redlener, Medical Director  
USA for Africa  
100 East 85th Street  
New York, NY 10028

Recipients of Guineaworm Wrap-Up in endemic African countries, especially those countries named, should consider submitting proposals for dracunculiasis elimination activities at national, provincial, district, or village levels as soon as possible. Programs to mobilize populations in endemic areas to control dracunculiasis by health education, development of water supply, vector control, and/or by personal protective measures, such as filtering drinking water, should fit the criteria for these grants very well. Since the total amount available for these grants is finite, early action is advised.

#### CONFERENCES/WORKSHOPS

#### SYMPOSIUM ON WATER AND SANITATION IN AFRICA



An International Symposium on Water Supply and Sanitation in Africa will be held in Atlanta, Georgia, May 3-8, 1987. This project, sponsored by AID, is being organized by the Institute for International Affairs and Development of Atlanta University and will feature presentations by international organizations and experts on water supply and sanitation programs in Africa. Reviews of policies, procedures, problems and solutions will be conducted. For more information, write: Water Supply and Sanitation Symposium, IIAD, Box 283, Atlanta University, 223 James P. Brawley Dr., SW, Atlanta, GA 30314. ATTN: Lillian M. Lewis.

INTERNATIONAL CONFERENCE ON RESOURCE MOBILIZATION  
FOR DRINKING WATER SUPPLY AND SANITATION IN DEVELOPING NATIONS

The American Society of Civil Engineers, in cooperation with other major U.S. professional organizations, is sponsoring an International Conference on Drinking Water Supply and Sanitation on May 26-29, 1987 at the Caribe Hilton Hotel in San Juan, Puerto Rico. The Conference will focus on technology appropriate to developing nations and issues in human resources, economics, and financing involved in the improvement of water supply and sanitation in developing nations. For further information, contact ASCE, 345 East 47th Street, New York, NY 10017-2398.



TROPICAL MEDICINE AND MALARIA CONFERENCE



The XIIth International Congress for Tropical Medicine and Malaria will be held in the International Congress Centre RAI, Amsterdam, September 18-23, 1988. The Congress covers the broad field of tropical medicine and hygiene and will provide a forum for critical review of current knowledge and new findings pertaining to health and problems of health services in the tropics. Discussions will focus on biochemical, immunological, clinical, epidemiological, and public health aspects of tropical medicine. For further information, contact the Congress Secretariat, XIIth International Congress for Tropical Medicine and Malaria, c/o OBA bv Europaplein 12, 1078 GZ, Amsterdam, the Netherlands.

SECOND AFRICAN REGIONAL WORKSHOP ON DRACUNCULIASIS

The Second African Regional Workshop on Dracunculiasis, co-sponsored by WHO/AFRO and other agencies, will be held in Accra, Ghana in March 1988.



RECENT PUBLICATIONS

Khan HD, Aminuddin M, Shah CH, 1986. Epidemiology and socio-economic implications of dracunculiasis in eleven rural communities of District Bannu (Pakistan). *J Pakistan Med Assn*, Sept;36:233-8.

A survey was conducted in July 1984 in 11 villages in southern Banner District, Northwest Frontier Province, Pakistan, to assess the occurrence of dracunculiasis, its clinical characteristics, economic impact, and methods of indigenous therapy. Approximately 20% of the 24,000 inhabitants (mostly farmers) had evidence of current or past infection. In the village of Aghzar Khel (population: 2,400), 200 active cases were detected and 34 cases were subsequently evaluated in more detail for

clinical manifestations and type of therapy used. Fever and urticaria occurred in most cases and, surprisingly, vomiting was recorded for over half of the patients. The average duration of disability (inability to work) was two months. Indigenous methods of treatment included local application of bites to the emerged worm. The authors conclude that dracunculiasis is an important disabling disease with serious clinical, economic, and social complications.

#### Other Publications

Adeyeba OA, 1986. Intestinal helminthiasis and haemoparasitosis in an area of endemic dracunculiasis in Oego State of Nigeria. *Int J Zoon*, 13(1):6-10.

Anonymous, 1986. Niamey workshop on dracunculiasis urges collaboration with oncho project. *Afr Health*, 9(1):9.

Bapna S, 1985. Relative susceptibilities of cyclops from Rajasthan State to guinea worm (Dracunculus medinensis) larvae. *Bull WHO*, 63(5):881-6.

Brieger B, 1986. Wells are expensive, but filters offer protection in the short term. *Afr Health*, 8(4):12.

Carlson BL, Sasseville VG, 1984. Dracunculus insignis in fishers in New Hampshire. *J Am Vet Med Assoc*, Dec 1;85(11):1327.

Dracunculiasis in Africa. Final report on a workshop, Niamey, Niger, 1-3 July, 1986. WHO/AFRO, Brazzaville.

Ekeh HE, Adeniyi JD, 1986. Targeting school children for tropical diseases control: Preliminary findings from a socio-behaviour research in Nigeria. *J Trop Med Hyg*, Feb;89(1):1-6.

Guineaworm Eradication Programme. Report of internal evaluation teams, 1986. National Institute of Communicable Diseases, Delhi: Government of India, 20-30 September.

Hopkins DR, 1986. Dracunculiasis. In: Clinical Medicine, edited by John A. Spittel, Jr. Philadelphia: Harper & Row, vol. 3, chapter 6.

Hopkins DR, 1987. Elimination of guinea worm disease. *Contact*, Feb; (95):9-14.

Hopkins DR, 1986. Guinea worm. *Afr Health*, 8(4):11-12.

Jali MV, 1986. Peroneal muscular atrophy and dracunculiasis: A preliminary report. *Indian J Pathol Microbiol*, Jan 29:91-2.

Justiz FR, Nunez AF, 1984. [The reporting of exotic diseases in the Pedro Kouri Institute of Tropical Medicine in 1982] (in Spanish). *Rev Cubana Med Trop*, Sep-Dec;36(3):334-42.

Koischwitz D, Distelmaier W, 1984. [Radiological detection of the Medina worm (Dracunculus medinensis)] (in German). ROFO, Mar;40(3):325-8.

Mehta S, Gupta AN, 1985. Epidemiological survey of guineaworm infection. Indian J Publ Hlth, Oct-Dec;29(4):251-6.

Osisanya JO, Elueze EI, Okoro FI, 1986. Dracontiasis: Pattern of morbidity in a north-western village in Sokoto State, Nigeria. Trans R Soc Trop Med Hyg, 80(2):293-4.

Quattara S, 1986. Vaincre le ver de Guinée. Famille et Développement, Oct;(42):7-14.

Reddy NB, Srinivasan T, 1985. Dracunculus medinensis presenting as larva migrans (Letter to the Editor). Trop Doct, Jul;15(3):148-9.

Regional workshop on dracunculiasis in Africa, 1987. MMWR, Jan 2; 35(51-52):797.

Ruiz PA, Diaz HA, et al, 1985. [Dracunculosis: Presentation of a case with multiple localizations] (in Spanish). Rev Cubana Med Trop, Sep-Dec; 37(3):300-7.

Watts SJ, 1986. Human Behavior and the transmission of dracunculiasis: A case study from the Ilorin area of Nigeria. Int J Epidemiol, Jun; 15(2):252-6.

Watts SJ, Edungbola LD, 1987. The distribution and ecology of guinea-worm disease in Nigeria, with special reference to Kwara State. In: Health and Disease in Tropical Africa, edited by Rais Akhtar. London: Gordon and Breach, pp. 193-201.

WHO, Parasitic Diseases Programme, 1986. Major parasitic infections: A global review. World Health Stat Q, 39(2):145-60.

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