Date: September 30, 1984

From: Dracunculiasis Group, CDC

Subject: GUINEAWORM WRAP-UP #6

To: Addressees

WHO COLLABORATING CENTER FOR DRACUNCULIASIS

Edward M. Brandt, Jr., M.D., Assistant Secretary for Health, U.S. Department of Health and Human Services, has concurred with the World Health Organization's designation of CDC as a WHO Collaborating Center for Research, Training, and Control of Dracunculiasis.

In this connection CDC will, resources permitting, undertake to:

Monitor the published literature on dracunculiasis, its etiologic agent, the occurrence of the disease itself throughout the world; and periodically report findings to WHO.

Undertake research deemed relevant and of high priority to improve control, diagnosis, treatment, and prevention of the disease.

Investigate changes in the epidemiology of dracunculiasis.

Advise researchers who are interested in related topics, and collaborate to the extent that conditions permit.

Encourage other countries' efforts in surveillance, study, and control of Dracunculus medinensis by aiding through consulting, planning, implementing, and evaluating.

Provide for and support (the eventual elimination of dracunculiasis through) training.

WHO MEDIUM TERM PROGRAM FOR PARASITIC DISEASES

This program includes, among other objectives for the period 1984-1989:

"Elimination of guinea worm infection, country by country, in association with the IDWSSD.

Under "Approaches," it lists among other examples, "the intensive use of health education to prevent the consumption of Cyclops-polluted water for the control of guinea-worm [sic] infection." and, "Most emphasis will be placed on the control of [filariasis, onchocerciasis and] guinea
worm infection... In association with the International Drinking Water Supply and Sanitation Decade, a great effort will be made to locate and eliminate all centres of guinea worm transmission, and to monitor the effects of the IDWSSD in terms of the reduction of the incidence of guinea worm infection.

NATIONAL ACTIVITIES

BURKINA FASO (Upper Volta)

L'Organisation de Coordination et Cooperation pour la Lutte Contre les Grandes Endemies has just published a booklet prepared by Dr. T.R. Guiguemde of the Centre Muraz. It gives clear, simple instructions (with illustrations) for teaching villagers about dracunculiasis and how they can prevent it. The publication is titled "Eliminons le ver de Guinee." A copy may be obtained by writing to: Section Parasitologie, Centre Muraz, B.P. 153, Bobo-Dioulasso, Burkina Faso.

INDIA

DANIDA Assistance

The Danish International Development Agency (DANIDA) has informed CDC of those of their health and water-projects in dracunculiasis-endemic areas. In India, the Danish Supported District Health Care Projects commenced in 1981. These projects affect eight districts of northern Madhya Pradesh and two districts of Tamil Nadu. (These territories comprise nearly 80,000 square kilometers, and are occupied by a rural population of 13 million persons.) An objective common to these projects is strengthened systems for delivery of health care and family welfare in rural areas. A comprehensive approach is featured.

Dracunculiasis is now found in four districts (Guna, Shivruri, Sagar, and Tikamgarh) of Madhya Pradesh State where DANIDA has water projects. Together these districts account for 350,000 persons. In late 1982, an innovative scheme (Guinea Worm Disease Eradication Programme was introduced in Guna District. This program has included an education-information-communication effort as well as usual direct, technical undertakings. It is now being evaluated.

Guineaworm Workshop and Task Force Meeting

The July 1984 Guineaworm Workshop in India reported improvements in surveillance:

The latest search (a month before the workshop) revealed dracunculiasis infections in 13,000 villages of 87 districts. Three thousand of these villages, however, are expected to be declared "free" of dracunculiasis within the next few months. (By definition, an erstwhile-infected village must be without cases at least three years before it is considered to have been freed of the malady.)

In addition:

Links between surveillance activities and water quality control work are making it possible to implement priori-
ties for allocating water system improvements according to the incidence of dracunculiasis.

To date, operations in India have been directed mainly at improving water sources in affected areas. But recent studies by the National Institute of Communicable Diseases (NICD) are expected to make wider use of Temephos (for vector control) a practical additional intervention. NICD also plans to distribute monofilament filters as a direct preventive measure, and bandages for wounds caused by the worms, in order to add personal prophylaxis as another method of reducing transmission.

NIGER

The Ministry of Health has requested WHO and USAID to provide a two-person team of consultants to visit the country and help develop a national plan of action against dracunculiasis and schistosomiasis. This consultation is scheduled for late October 1984.

NIGERIA

On a visit to Okedere and Ayelugun, members of WHO's Tropical Disease Research/Socioeconomic Research Steering Committee were impressed by local school teachers' deep concern about the prevalence of guineaworm. In one school, 230 of 450 students were absent on the day of the doctors' visit, because of guineaworm infections. Fifty other students who were in school that day also had dracunculiasis infections.

RECENT PUBLICATIONS


This article summarizes the report of a consultant epidemiologist who visited Imo, Gongola, and Kwara States at the request of UNICEF/Nigeria to advise on the possibility of including dracunculiasis control in UNICEF water projects in these states.


This is a summary report of the Sixth Task Force meeting and WHO-assisted Workshop of the Indian Guinea Worm Eradication Program which was held at Tirupati, Andhra Pradesh, in July 1983.


This article briefly describes Dracunculus, dracunculiasis, and current efforts to control the disease. A list of suggested reading is included.


In Egbejila (a community near the city of Ilorin, capital of Kwara
State, Nigeria) of 589 persons who were examined in June of 1983, 265 had active ulcers caused by emerging Guineaworms. The difference in the infection rates among males (42 percent) and females was not statistically significant, but the infection rates among children less than ten years of age were significantly less than those of adults. More than one guineaworm lesion was found in 67 percent of the persons examined, and 55 percent were incapacitated to the extent that they could not effectively perform their daily tasks such as going to farm, school or market, fetching water, or performing other domestic duties. Eighteen (51.4%) of 35 pupils in the village primary school could not attend classes at the time of the survey. The Asa dam—built to relieve acute scarcity of water in Ilorin—is mentioned as a circumstance critical to increased incidence of dracunculiasis in this area.


An epidemiologic study of dracunculiasis prevalence, density of the Cyclops population, annual periods of transmission, customary treatment and current popular beliefs about the disease in Togo. Prevalence in seven villages ranged from 24 percent to 83 percent. Transmission was found to start at the beginning of the dry season in Bassar and in Haho; and in Zio, with the beginning of the "little rainy season." Traditional attitudes toward the disease continue to be strong. It is seldom treated by the inhabitants of this region; when it is, leaves of local vegetation are the source of whatever specific agent is used. Advocated method for control in this situation is filtering (passing water through finely woven cloth) before ingesting the water. Demonstrations of this method were recommended as an activity for water-project health teams that take part in village health-education.

Bourne, Peter G. (ed.) 1984 Water and Sanitation: Economic and Sociological Perspectives

A chapter "Eradication of Dracunculiasis," (by Donald R. Hopkins) is a concise but complete exposition of the disease and its control. Of all the potential "health benefits" of the International Drinking Water Supply and Sanitation Decade, the eradication or control of dracunculiasis (Guineaworm disease) is probably the most dramatic. Dracunculiasis is the only communicable disease that is transmitted only by contaminated drinking water. It is, consequently, the only disease whose incidence can be reduced to zero (even in endemic areas) if clean drinking water is made available and is used exclusively. Since the disease has a significant direct impact on farming and other economic capabilities of affected persons and communities, and it is a very visible, dreaded problem where it occurs, it offers advocates of the Decade a unique opportunity. That opportunity should be exploited to demonstrate favorable outcomes of Decade activities and thereby encourage increased support for the Decade at all levels—village, national, and international.