




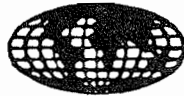
# Memorandum

Date April 15, 1990

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


Subject GUINEA WORM WRAP-UP #27

To Addressees



## INTERNATIONAL ACTIVITIES

### MAJOR DONATION BY AMERICAN CYANAMID

 **CYANAMID** On March 28, Former U.S. President Jimmy Carter and Mr. Albert J. Costello, the executive vice president of American Cyanamid Company, held a press conference at The Carter Center in Atlanta, Georgia, USA, to announce that the American Cyanamid Company had agreed to donate Abate (temephos) valued at over US\$2 million to the Carter Center's Global 2000 Guinea Worm Eradication Program. This is the total amount of Abate estimated to be needed for use in Africa until the disease is eradicated in 1995. This major donation was also announced the same day in Yamoussoukro, Cote d'Ivoire, at the opening session of the Third Regional Conference on Dracunculiasis in Africa (see below).

In accepting the donation, Former U.S. President Carter said that "American Cyanamid has exhibited a new brand of corporate citizenship. They have a product that is necessary to eliminate a debilitating disease, and when presented with an opportunity, they chose to give all that was needed for our worldwide eradication campaign. This generous gift will be instrumental in ending the unnecessary suffering of millions of people." In pledging the donation, the executive vice-president of American Cyanamid, Mr. Albert J. Costello, said, "As a life-sciences corporation dedicated to the development of agricultural and medical products, it is very satisfying to know that Cyanamid's donation of Abate larvicide will enable men, women, and children to live without fear of the water they drink to survive. In donating Abate to The Carter Center, we are helping to insure that it will reach the wells and water holes of West Africa where it is needed."

UNICEF has agreed to assist in shipping and distributing the chemical in Africa.

**THIRD AFRICAN REGIONAL CONFERENCE MEETS IN YAMOUSSOUKRO**



GLOBAL 2000



On March 28-30, 1990, the Third Regional Conference on Dracunculiasis in Africa met at Yamoussoukro, Cote d'Ivoire. Approximately 120 participants included representatives of 17 African countries and India. Kenya was the only endemic African country not represented. Other participants included representatives of the sponsoring agencies (WHO, UNICEF, UNDP, Global 2000), the Organization of African Unity (OAU), OCCGE, OCEAC, the West African Health Community, Centers for Disease Control, Onchocerciasis Control Program (OCP), U.S. Peace Corps, Danish Bilharziasis Laboratory, Health and Development International, USAID, American Cyanamid, and the Adventist Development and Relief Agency.



Highlights of the conference included UNICEF's announcement of support for a 10,000-village dracunculiasis elimination program in Africa. Nigeria and Ghana presented results from nationwide searches for cases during 1989. Reports of new surveillance data from most other endemic countries indicated that all endemic countries except Sudan were planning to conduct or begin national case searches in 1990 and that most already had or were preparing national plans of action (see the following tables):

**STATUS OF DRACUNCULIASIS ELIMINATION PROGRAMS**

Country	Target Date for Elimination	National Search Conducted/Planned	Plan of Action Developed	National Coordinator Designated
Benin	1995	2/90	Yes	Yes
Burkina Faso	1995	1990	Yes	Yes
Cameroon	1993	1984 - 1990	Yes	Yes
C. A. R. #	None	9/90	No	No
Chad	1995	1990	1990	No
Cote d'Ivoire	1995	1990	No	No
Ethiopia	1995	1990	No	No
Gambia	+	9/90	No	No *
Ghana	1993	1989 - 1990	Yes	Yes
Guinea	+	6/90	1990	?
India	1991	1980 - 1990	Yes	Yes
Kenya	?	1989	1990	Yes
Mali	1995	9/90 - 11/90	Yes	Yes
Mauritania	?	9/90	No	No *
Niger	1995	5/90	Yes	No
Nigeria	1995	1988 - 1990	Yes	Yes
Pakistan	1990	1987 - 1990	Yes	Yes
Senegal	1995	12/90 - 1/91	1990	No
Sudan	1995	None	No	Yes
Togo	1995	11/90 - 3/91	Yes	No
Uganda	1995	1990	No	Yes

\* Official in charge of communicable diseases is responsible for dracunculiasis.  
 # Central African Republic  
 + Indigenous disease may have already disappeared.

**Reported Cases of Dracunculiasis, By Year, 1985-1989\***

Country	1985	1986	1987	1988	1989
Benin	...	...	400	33962	5692
Burkina Faso	458	2558	1957	1266	5122
Cameroon	168	86	...	752 +	871 +
Central African Republic	31	-	1322	...	...
Chad	9	314	...	...	...
Cote d'Ivoire	1889	1177	1272	1370	1555
Ethiopia	1467	3385	2302	751	...
Gambia	-	-	-	...	...
Ghana	4501	4717	18398	71767	171572 +
Guinea	-	-	-	...	1
India	30950 +	23070 +	17031 +	12023 +	7881 +
Kenya	...	...	...	...	5+
Mali	4072	5640	435	564	483
Mauritania	1291	...	227	608	447
Niger	1373	...	699	...	...
Nigeria	5234	2821	216484	653492 +	622414 +
Pakistan	...	...	2400	1111 +	535 +
Senegal	62	128	132	138	...
Sudan	...	822	399	542	...
Togo	1456	1325	...	178	2749
Uganda	4070	...	...	...	124

\* From passive reporting and/or area-limited searches unless otherwise indicated.

+ National survey.

... No data available.

- Zero cases reported.

Several examples of successful interventions in endemic villages were presented. Former U.S. President Jimmy Carter sent a written message conveying his wishes for a successful meeting and announcing the major gift of Abate from American Cyanamid.

UNICEF assured the participation of more persons from water sector agencies than ever before. The participation of a representative from the OAU was also a first. The conference received significant coverage in the local press, and extensive coverage on Ivorian national television.

Participants adopted a statement in which the conference "unanimously expresses its thanks and gratitude to the American Cyanamid Company for its generous donation of Abate for Guinea worm eradication programs in Africa."

The unofficial text of the 12 recommendations adopted at this conference follows:

#### RECOMMENDATIONS

1. All endemic countries that have not yet done so are urged to conduct a national search for cases of dracunculiasis in 1990. Assistance from UNICEF is available if necessary. The need to make Guinea worm a reportable disease and to report cases to WHO by March 31 of the following year is re-emphasized. This conference reaffirms the case definition of dracunculiasis adopted at Accra in 1988.

2. All endemic countries are urged to establish, as soon as possible, appropriate target dates, by 1995, for the elimination of dracunculiasis. It should be possible to stop transmission of dracunculiasis for example in at least two countries before the next African Regional Conference meets in 1992.
3. Each endemic country is urged to appoint a National Coordinator for Guinea worm eradication, prepare a national plan of action (with assistance from the WHO Collaborating Center if necessary), and convene a national meeting on the disease.
4. Neighboring endemic countries should cooperate in surveillance and control measures.
5. The critical importance of mobilization of the highest political leaders of endemic countries is noted. This conference therefore recommends that Guinea worm disease and its eradication be included on the agenda of the conference of Heads of State and government of the Organization of African Unity in July 1990.
6. The United Nations agencies are requested to ensure that Guinea worm eradication is included among the issues discussed at the World Summit for Children in New York in September 1990.
- 7. Sponsoring agencies of the African Development Bank/World Bank Workshops on Rural Water Supply and Sanitation Sector Conference in Abidjan in May 1990, and the New Delhi Global Consultation on "Safe Water Year 2000" in September 1990 are requested to emphasize the progress to date, and needs, of Guinea worm eradication.
- 8. This conference stresses the urgent need for water supply projects to include effective health education and social mobilization, and for such projects to be brought to bear more effectively in villages where Guinea worm is endemic. Priority should be given to the most highly endemic villages for rural water supply and other primary health care interventions.
- 9. The critical relevance to this eradication initiative of accelerated support for rural water supply activities beyond the end of the Water and Sanitation Decade is also stressed.
10. A mandate is needed from the 1991 World Health Assembly (WHA) to implement the process for certification of elimination of dracunculiasis, and increased support to assist countries in surveillance, program development, and implementation. Endemic countries are reminded that WHO must submit a report on the status of this eradication initiative to the 1991 WHA, and that report must be completed in October 1990.
11. The conference recommends that, in view of the rapidly increasing activity to eradicate dracunculiasis, the African Regional Office of WHO should convene a meeting of National Coordinators of Guinea Worm Eradication Programs in Brazzaville in March 1991, to be followed by the 4th African Regional Conference on

*Handwritten notes:*  
 - R small -  
 - 5-12 million all  
 - disability  
 - agriculture  
 - water and sanitation  
 - mobilizing of funds

Dracunculiasis in an English-Speaking endemic country in 1992. Other meetings on relevant specialized topics will probably also be needed before the next conference in 1991.

12. Sponsoring United Nations agencies are encouraged to convene informal discussions among other international, bilateral, and non-governmental agencies on support for dracunculiasis eradication programs.

INFORMAL CONSULTATION ON CERTIFICATION OF ELIMINATION HELD AT WHO, GENEVA

Representatives of 23 African and Asian countries met at WHO headquarters in Geneva on 19-21 February 1990, with several members of WHO staff and consultants to consider criteria and procedures for certifying the elimination of dracunculiasis in endemic or formerly endemic countries. The provisional document (Certification of Elimination of Dracunculiasis, WHO/FIL/90.185) prepared at this consultation will be submitted to the WHO Executive Board in January 1991 and to the World Health Assembly in May 1991. According to the criteria recommended in the provisional document, elimination of dracunculiasis will be considered to have been achieved in a given country when an adequate surveillance system has confirmed that no case of the disease has been contracted locally for three consecutive years.



**NATIONAL ACTIVITIES**



GHANA CONDUCTS NATIONAL CASE SEARCH

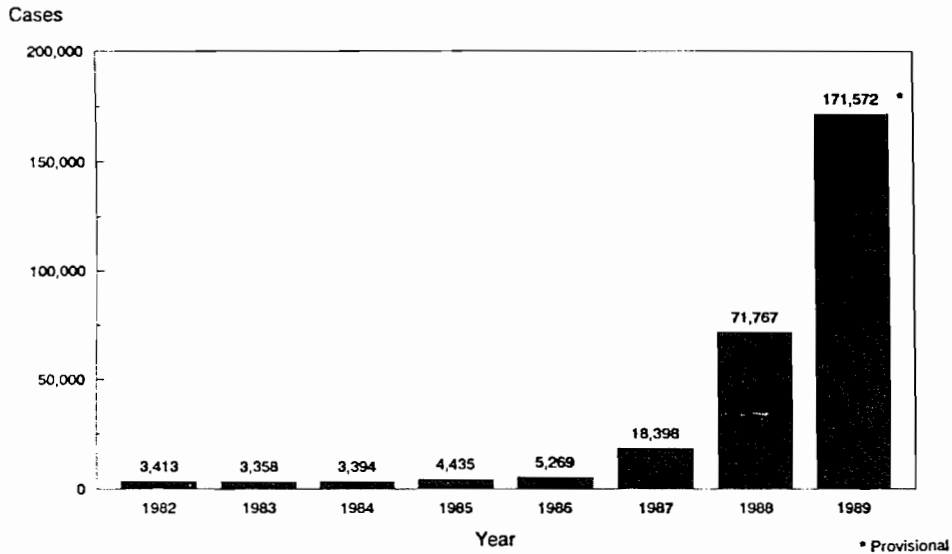


The Ghana Guinea Worm Eradication Program conducted its first national case search from November 1989 through January 1990. The search involved mobilization of over 12,000 persons; it required 60 working days. A total of 19,379 villages (92% of rural villages) were visited, at a cost of US\$50,000. The search identified a total of 171,572 cases of Guinea worm in Ghana in 1989 in 6,576 endemic villages. Three of the country's 10 regions (Brong-Ahafo, Northern, and Volta,) contained over 90% of all cases. External support for the national case search was provided mainly

by the USAID Mission to Ghana and Global 2000/BCCI, with participation of some U.S. Peace Corps Volunteers and five U.S. medical students on International Health Fellowships. This case search also collected information on the prevalence of urinary schistosomiasis. The increase in annual cases of dracunculiasis reported as a result of improved surveillance is illustrated in Figure 1 (see next page).

On March 20, a parasitic disease research laboratory was commissioned at Tamale in the Northern Region. It will be used for research related to dracunculiasis and schistosomiasis. The laboratory is a joint project of the Ghana Ministry of Health and the Danish Bilharziasis Laboratory, with financial support from the Danish International Development Agency (DANIDA).

**Fig. 1. Reported Cases of Dracunculiasis, Ghana**



NIGERIA CONVENES THIRD NATIONAL CONFERENCE

The Third National Conference on Dracunculiasis in Nigeria was held in Lagos on March 19, 1990. The conference was co-sponsored by the Federal Ministry of Health, UNICEF, and Global 2000/BCCI. There were over 150 participants, including the Federal Minister of Health, the Honorable Prof. Olikoye Ransome-Kuti, more than 12 State Commissioners of Health, the Chairmen of Guinea Worm Task Forces from all the 21 states and the Federal Capital Territory (FCT), and individuals from Global 2000, UNICEF, WHO, UNDP, Nigerian universities and research institutes, representatives of the mass media, the (Federal) Directorate of Food, Roads, and Rural Infrastructure (DFRRI), the mass mobilization agency (MAMSER), the Federal Ministry of Science and Technology, and others.



Provisional results of the second national case search, which was conducted from November 1989 to March 1990, were released at the conference. So far, a provisional total of 622,651 cases have been identified in 5967 villages, not including Kano State, which had not yet completed its search. Nine states (Cross River, Imo, Kaduna, Kwara, Lagos, Ogun, Ondo, Plateau, Rivers) and the FCT recorded fewer cases (221,786) than in the first national search conducted a year earlier (328,771), with overall decline in cases in those states of 32.5%. One of the sharpest declines in cases (from 50,356 in the previous search to 16,917 this year) occurred in Kwara State, where a UNICEF-assisted rural water supply project has been active since 1986. At the opening ceremony, the Federal Minister of Health announced that henceforth, primary health care facilities were directed to treat patients with Guinea worm disease, and to visit affected villages to identify and treat victims who are unable to come to the clinics. Another highlight of the conference was the commissioning of the Proceedings of the Second National Conference on Dracunculiasis in Nigeria, edited by Prof. Luke Edungbola, and published as a supplement to the Nigerian Journal of Parasitology (see Recent Publications).

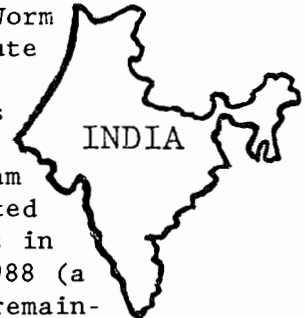
The 9th meeting of the National Task Force of the Nigerian Guinea Worm Eradication Program (NIGEP) met on March 20, 1990, the first annual National Guinea Worm Day. A recording of the harmonious anthem, "1995 is Our Target," sung by a 42-member all boys choir, the Glorious Voices of Hope Waddel Training Institution (Calabar), with lyrics by Dr. Eka Braide, received a rousing reception.

Targeting of endemic villages for rural water supply projects has begun in Anambra, Borno, Gongola, Kano, Kwara, Niger, Ogun, Plateau, and Sokoto States. Cloth filters are being distributed or pilot-tested in parts of Bauchi, Borno, Niger, and Plateau States. State Commissioners of Health have toured endemic villages in Anambra, Kwara, Niger, and Ondo States. The Ministries of Health and Education in Niger State have distributed Primary school workbooks with Guinea worm health education messages on the covers. Results of the South East Zone Essay Competition for primary school children were announced at that 6th zonal meeting in January. The winner of the competition on the topic "Guinea worm disease and its prevention," 13-year old Master Anietie Ndarake of Akwa Ibom, received a certificate and 100 naira for school fees and books.

UNICEF plans to increase its assistance to the Guinea worm eradication effort in Nigeria, including data analysis and policy development at the national level; an allocation of \$2 million for related operational research in Anambra, Imo, and Kwara States (1990-1991), with the major emphasis being on field operations in those three states plus eight others in the 1991-1995 country program.

#### INDIA CONVENES 12th TASK FORCE MEETING

The Twelfth Task Force Meeting of the Indian Guinea Worm Eradication Program (GWEP) met at the National Institute of Communicable Diseases in Delhi, January 15-16, 1990. Main purposes of the meeting were to review the status of the national program, assess the epidemiologic situation, and to prepare the plan of action for the program for 1990-91. Based on the three active searches conducted in 1989, a total of 7881 cases occurred in 3596 villages in 1989, as compared to 12,023 cases in 4278 villages in 1988 (a reduction of 34% in the number of cases). Of the six remaining endemic states, for the first time, Gujarat reported only 6 cases, all of which were found to be imported (5 from Madhya Pradesh and 1 from Rajasthan). Rajasthan had 4872 cases, Madhya Pradesh 1408, Karnataka 896, Maharashtra 475, and Andhra Pradesh 224. The national target date for achieving zero incidence has been changed, to 1991.



Several steps were taken in 1989 to strengthen the program, including deployment of 10 epidemiologic surveillance teams (with funding from WHO), preparation of a set of 25 teaching slides, and revision of the Operational Manual on the GWEP (4th edition). An annual national "Guinea Worm Education Day" was celebrated for the first time, by all endemic states during the last week of April 1989. The main purpose of the latter is to increase mass awareness of the program. [Readers desiring copies of recent documents published by this program (see Recent Publications) should write to: Dr. Ashok Kumar, Deputy Director, National Institute of Communicable Diseases, 22 Sham Nath Marg, Delhi - 110 054, India].

MALI TO RECEIVE MORE ASSISTANCE FROM IMPACT

IMPACT, an international initiative against avoidable disablement, that financed a pilot intervention effort against Guinea worm in an area of northwestern Mali with Band Aid in 1987-88 and a survey in the same area with UNDP funding before that, is the recent beneficiary of a grant of US\$200,000 from the Malaysian Organizing Committee for "Sport Aid 88." The grant, which is available immediately, will be used to directly support operational Guinea worm eradication activities in Mali. An agreement was reached in principle between IMPACT and Mali officials at the Third African Regional Conference on Dracunculiasis to use this support for control measures in the Douentza Cercle of the Mopti Region, in northeastern Mali, an area of high endemicity.



BENIN

In 1987, USAID, UNICEF, and the Government of Benin, in cooperation with U.S. Peace Corps, established a water and sanitation project in Zou Province (Zou-Nord) with the objective of reducing the incidence of guinea worm disease through health education, provision of water supplies, and sanitation. Results of a case search conducted in that province from July 1987 to June 1988 revealed a total of 13,366 cases. In contrast, for the period July 1989-June 1990, the number of guinea worm cases detected was 5,692, a 46% reduction from the previous year (1988-89) and 60% from the base line survey in 1987.

CDC PUBLISHES PLAN OF ACTION GUIDELINES

Guidelines for Development of National Plans of Action for Dracunculiasis Eradication is the most recent publication of the WHO Collaborating Center for Research, Training, and Control of Dracunculiasis at CDC. Copies may be requested by writing to the address shown below:



WHO Collaborating Center for Research, Training, and Control of Dracunculiasis  
Centers for Disease Control  
Division of Parasitic Diseases, F-22  
Atlanta, Georgia 30333  
U.S.A.

Copies of the above Guidelines, as well as the Guidelines for Surveillance and for Vector Control in national guinea worm programs, will also be available in French by June 1, 1990.



**RECENT PUBLICATIONS**

Akhter M, 1990. SWACH: An integrated approach to control Guinea worm disease in India. Water Quality Bull, 15:22-28,63.



Brandt SA, Everhard ML, 1990. Dracunculus insignis in ferrets: Comparison of inoculation routes. J Parasitol, Feb;76(1);93-95.

Brieger WR, 1990. Farmers' loss due to Guineaworm disease: A pilot study. J Trop Med Hyg, 93:\_\_\_\_\_

Brieger, WR, Watts S, Yacoob M, 1989. Guineaworm, maternal morbidity, and child health. J Trop Peds, 35:285-288.

This paper provides valuable additional documentaton of the impact of Guinea worm on mothers and their young children. It reports on a pilot case study of 42 women in two rural Nigerian communities. It concludes in part: "Guineaworm was responsible for half of child immunization defaulting and deterred women from using maternity services. Guineaworm kept women from their jobs and trades, costing an average of approximately \$50 in lost income, a sizable chunk of a family's support considering the annual per capita income for the area is just over \$100."

Brieger WR, Ramakrishna J, Adeniyi JD, 1989-90. Community response to social marketing: Filters for Guineaworm control. Intl Qrtly Comm Hlth Educ, 10:3-17.

CDC, 1990. International task force on disease eradication, MMWR, 39(13):209-217, Apr 6.

Edungbola LD (ed), 1989. Proceedings - Second national conference on dracunculiasis (Guinea worm disease) in Nigeria. Nigeria J Parasitol (Suppl No.1):1-84.

Edungbola LD, Watts SJ, 1990. The elimination of dracunculiasis in Igbon, Oyo State, Nigeria: The success of self-help activities. J Trop Med Hyg, Feb;93(1):1-6.

Grant JP, 1990. Guinea worm disease: Elimination in the 90s. In: The State of the World's Children, 1990. Oxford: Oxford Univ Press, p. 40.

Hopkins DR, 1990. We can get rid of Guinea worm. World Health, Jan-Feb: 26-27.

Kumar A, Sharma RS, Kaul SM (eds), 1989. Guineaworm Eradication Programme in India - Operational Manual (Revised 4th edition). Delhi: National Institute of Communicable Diseases, 85pp.

Kumar A, Biswas G, Kaul SM, Sharma RS, 1989. Guineaworm Eradication Programme in India - Report of Fourth Independent Evaluation (May 1989). Delhi: National Institute of Communicable Diseases, 63pp.

Kumar A, Sharma RS, Kaul SM, 1989. Guineaworm Eradication Programme - Teaching modules on GWEP. Delhi: National Institute of Communicable Diseases, 27pp.

Kumar A, Kaul SM, Biswis G, Verghese T, 1990. Guineaworm Eradication Programme - XII Task Force Meeting (January 1990) Report and Recommendations. Delhi: National Institute of Communicable Diseases, 58pp.

Larsson RW, 1990 Elimination of Guinea worm disease in the People's Republic of Benin. Water Quality Bull, 15:52-57.

Miller RL, 1989. Dqr, spinning and treatment of Guinea worm in P. Ebers 875. J E A, \_\_:75-\_\_.

Nwoke BEB, 1990. Cultural considerations in Guinea worm eradication programmes. Africa Health, Jan:32.

Petit MM, Deniau M, Tourte-Schaefer C, Amegbo K, 1989. Longitudinal epidemiologic study of dracunculosis in the south of Togo [in French]. Bull Soc Pathol Exot Filiales, 82:520-530.

Richards F, Hopkins D, 1989. Surveillance: The foundation for control and elimination of dracunculiasis in Africa. Intl J Epid, 18:934-943.

Rymer R, 1990. The Mission. In Health, 4(2):66-76.

Saxena VK, Tyagi VK, Kaul SM, 1990. Calculation of water volume in step wells for cyclopicide application. Echo-epidemiological implication: Mathematical validation of some theoretical considerations. J Comm Dis, Sept;21(3):222-228.

Selby P, 1990. Eradication of Guinea worm disease. Lancet, Mar 31;1: 782-783.

Stroot P (ed), 1989. Towards the end of Guinea worm disease. World Health, Nov:30-31.

Yacoob M, Brieger WR, Watts S, 1989. Primary health care: Why has water been neglected? Health Policy & Planning, 4:328-333.

Yacoob M, Brieger WR, Watts S, 1990. What happened to Guinea worm control? An issue of water quality and health improvements. Water Intl, 15:27-34.

CORRECTION:

1988 AFRICAN RESOLUTION ON DRACUNCULIASIS ERADICATION

The incorrect version of the resolution adopted by the WHO Regional Committee for Africa in September 1988 was published in the "Guinea Worm Wrap-Up #21" (October 15, 1988). The correct version included the specific target year for eradication: 1995. The correct resolution (AFR/RC38/R13) is reproduced on the next page [Source: Handbook of Resolutions and Decisions of the Regional Committee for Africa, Vol. II (1981-1988). WHO Regional Office for Africa, December 1988, pp. 136-137]:

WORLD HEALTH ORGANIZATION  
REGIONAL OFFICE FOR AFRICA



ORGANISATION MONDIALE DE LA SANTE  
BUREAU REGIONAL DE L'AFRIQUE

ORGANIZAÇÃO MUNDIAL DA SAÚDE  
SEDE REGIONAL EM ÁFRICA

REGIONAL COMMITTEE FOR AFRICA

AFR/RC38/R13  
September 1988, 38,23

Thirty-eighth session  
Brazzaville, 7-14 September 1988

ORIGINAL: ENGLISH

ERADICATION OF DRACUNCULIASIS

The Regional Committee,

Having considered the report of the Regional Director that outlines the considerable adverse effects of dracunculiasis (guinea worm disease) on health, agriculture, education and the quality of life in affected areas of the Region;

Recognizing the special opportunity afforded by the International Drinking Water Supply and Sanitation Decade (1981-1990) to combat dracunculiasis;

Stressing the importance of maximizing the benefits to health by using intersectoral approach and community mobilization in the context of primary health care;

Aware of the progress achieved in the implementation of action plans in several Member States for the control of guinea worm disease since the International Workshop in Washington, DC in 1982;

1. ENDORSES the efforts to eradicate this infection, in association with the International Drinking Water Supply and Sanitation Decade;
2. ENDORSES a combined strategy of provision of safe sources for drinking-water, active surveillance, health education, vector control and personal prophylaxis for eradicating the infection;
3. CALLS ON all affected Member countries:
  - a. to establish as quickly as possible, within the context of primary health care, plans of action for eradication of dracunculiasis by 1995, giving high priority to endemic areas in providing safe sources of drinking water;
  - b. to intensify national surveillance of dracunculiasis, and report the resulting information regularly to WHO;
4. INVITES bilateral and international development agencies, private voluntary organizations, foundations, agencies and appropriate regional organizations:
  - a. to assist countries' efforts to add, within the context of primary health care, a dracunculiasis control component to ongoing or new water supply development in the rural areas, health education and agricultural programmes in endemic areas by providing required support;
  - b. to provide extrabudgetary funds for this effort;
5. URGES the Regional Director:
  - a. to intensify coordination with other international organizations and bilateral agencies for mobilizing the necessary resources in support of dracunculiasis eradication activities in affected countries;
  - b. to intensify regional surveillance so as to monitor trends in prevalence and incidence of this disease and encourage cooperation and coordination between adjacent endemic countries;
  - c. to submit a report on the status of these activities in the countries concerned to the Regional Committee at its thirty-ninth session.



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