

Dracunculiasis Eradication

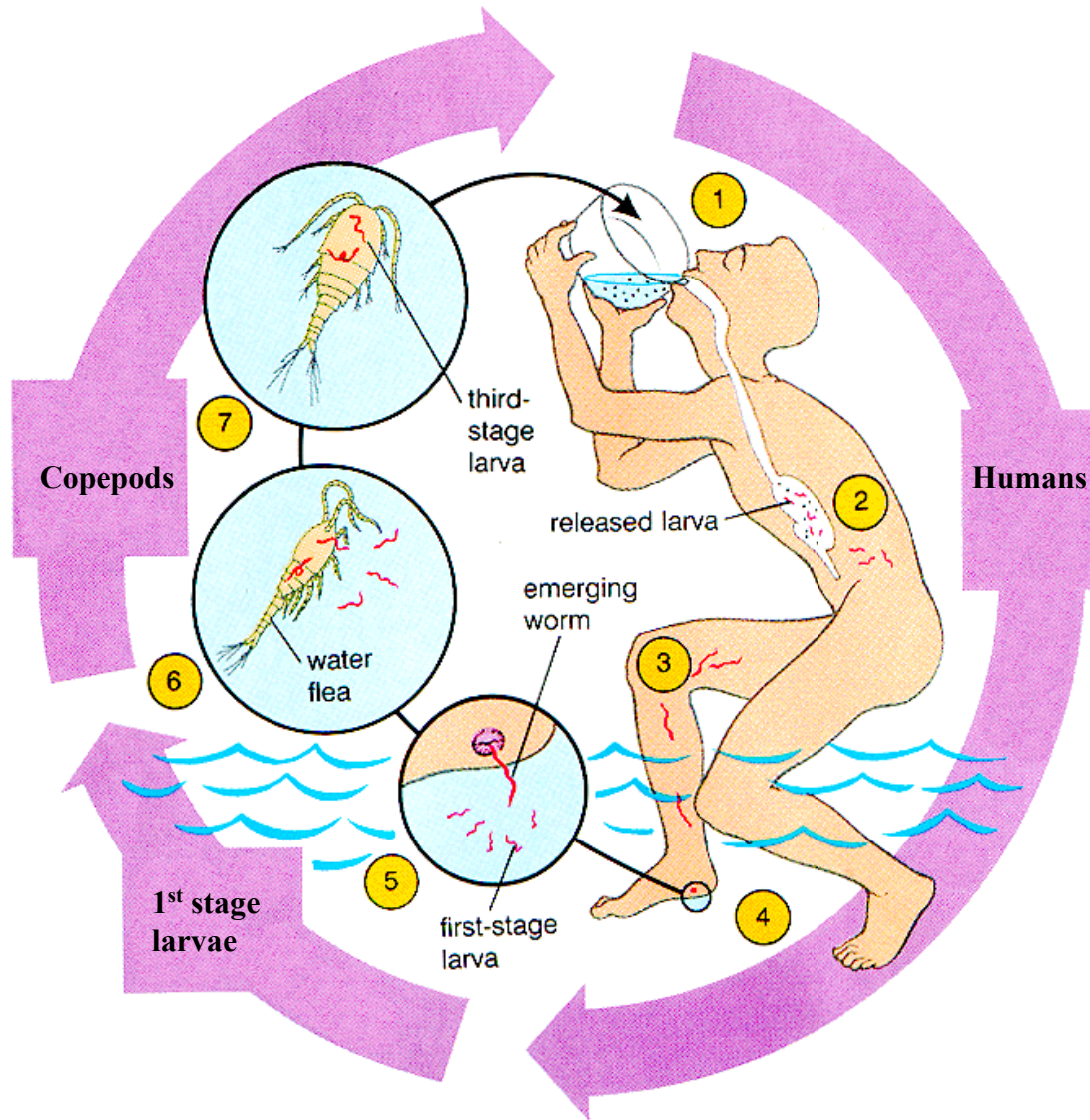
Ernesto Ruiz-Tiben, Ph.D.

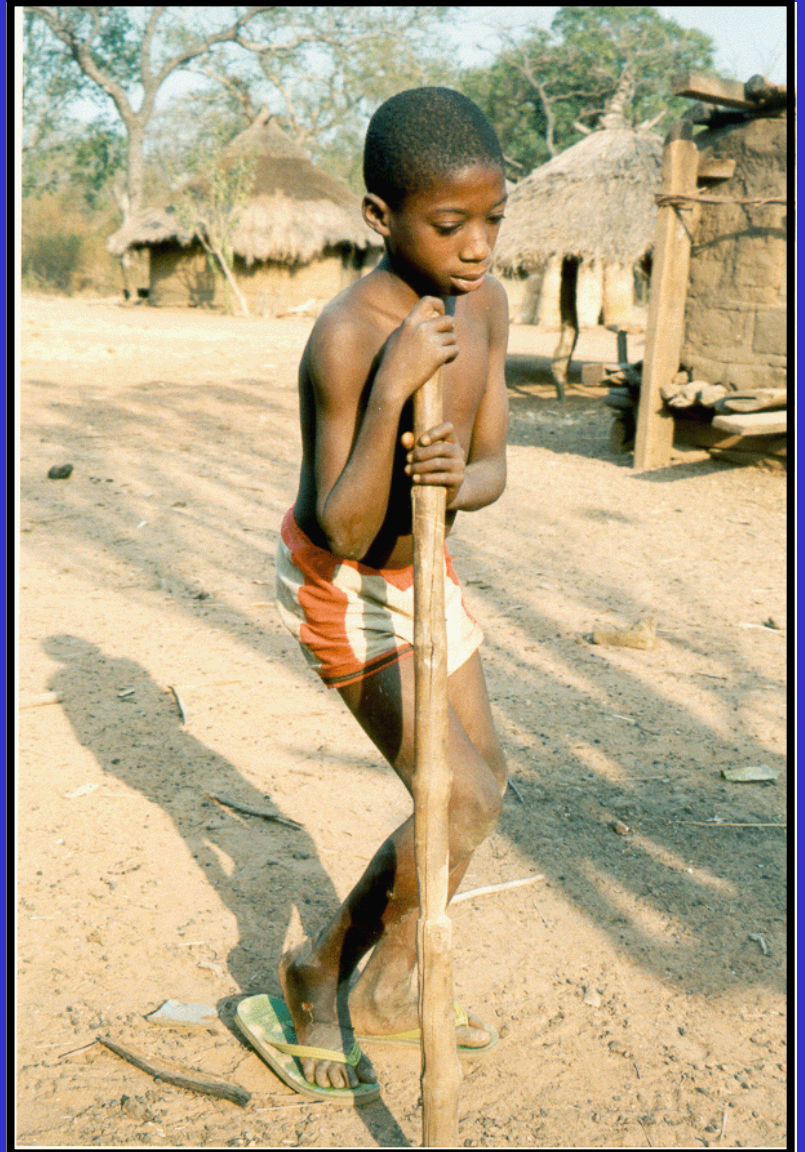
Technical Director

Dracunculiasis Eradication

The Carter Center

Lifecycle of *Dracunculus medinensis*







1980

CDC suggests that eradication of dracunculiasis, a disease only transmitted via drinking water, would be the ideal indicator of the success of the United Nations 1980-1990 International Drinking Water Supply and Sanitation Decade

1982

Workshop on Opportunities for Control of Dracunculiasis

- **Geographic distribution of dracunculiasis confined to countries in sub-Saharan Africa, India, Pakistan and possibly Yemen**
- **Elimination of dracunculiasis from USSR in 1920s and from Iran in 1970s without recurrence of the disease in humans after many years**
- **No animal reservoir**
- **No human carrier state beyond the one year incubation period**

1982

Workshop on Opportunities for Control of Dracunculiasis

- **No human immunity against infection**
- **No available medication against the disease**
- **Transmission of the disease markedly seasonal**
- **Unique clinical presentation**

1982

Workshop on Opportunities for Control of Dracunculiasis

- **Control methods included health education & community mobilization**
- **Provision of safe sources of drinking water**
- **Application of the insecticide Abate (temephos) to unsafe sources of drinking water**

1984

**CDC Designated the WHO Collaborating Center
for Research, Training, and Eradication of
Dracunculiasis**

1986

First African Regional Workshop on Eradication convened in Niamey, Niger

- **Estimate of 3.2 million cases annually in Africa and 120 million people at risk of the disease in endemic areas**
- **Global burden of dracunculiasis estimated to be 3.5 million cases annually**

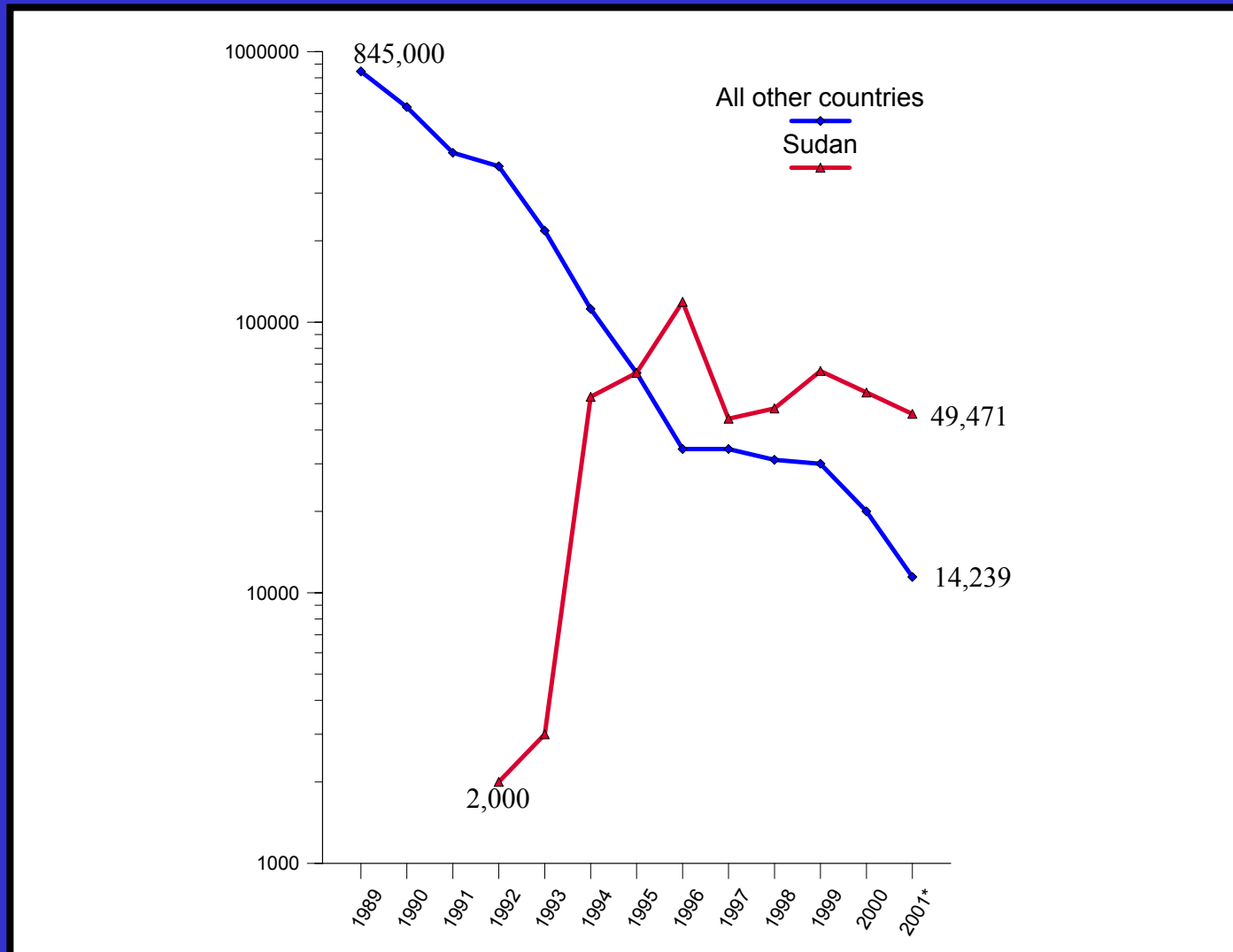
Dracunculiasis Eradication Campaign Program Start-Ups

Year interventions started	Country	Active Programs (cumulative)
1983	India	1
1988	Pakistan	2
1989	Nigeria, Ghana	4
1991	Cameroon	5
1992	Togo, Burkina Faso, Senegal, Uganda	9
1993	Benin, Mauritania, Niger, Mali, Cote d'Ivoire	14
1994	Sudan, Kenya, Chad, Ethiopia	18
1995	Yemen	19

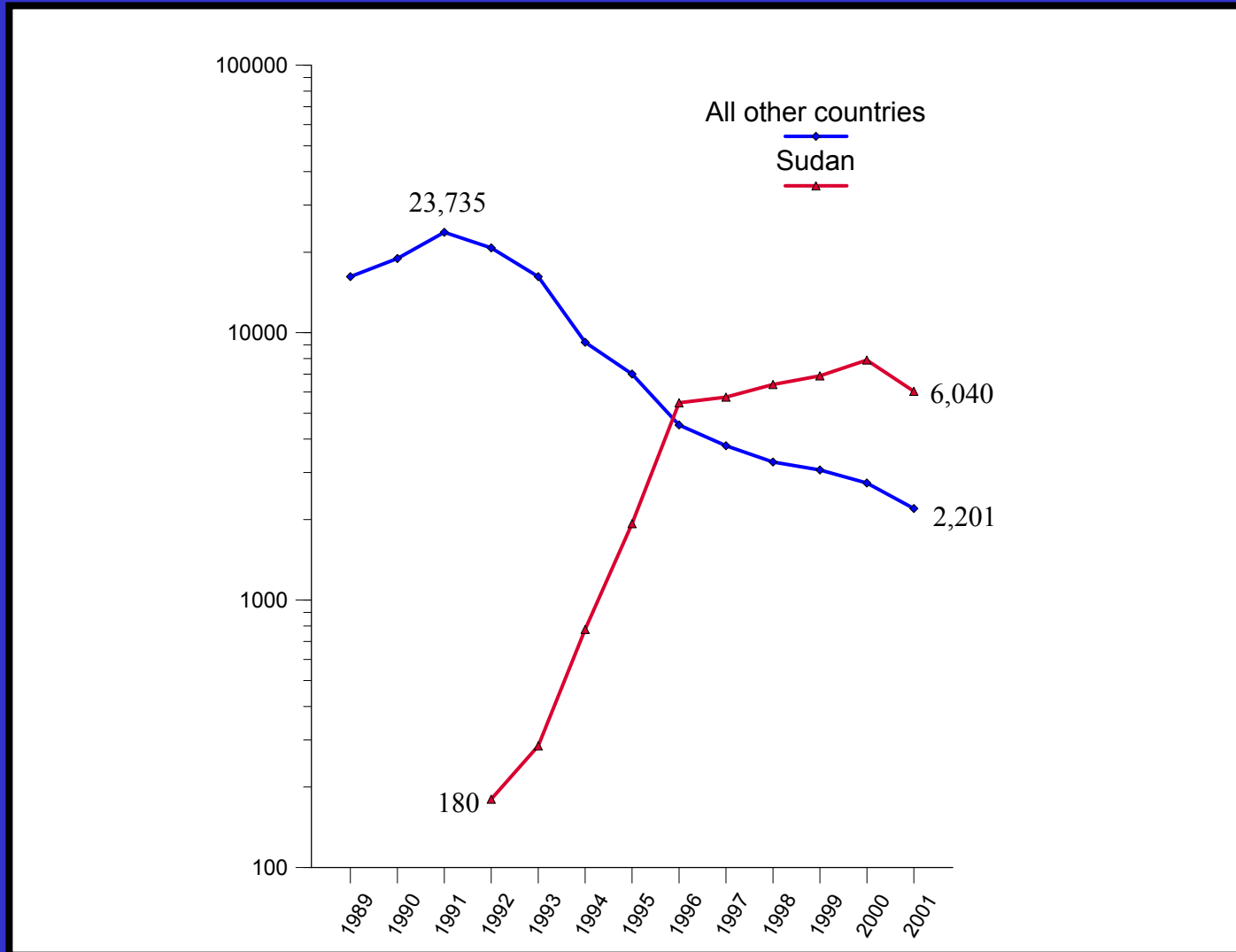
Interventions Against Dracunculiasis

- **Village-based surveillance and monthly reporting of cases**
- **Case Containment**
- **Health education and community mobilization**
 - **Education of people about the origin of the disease**
 - **Empowering villagers to take action against the disease**
 - **Keeping persons with emergent worms from contaminating sources of drinking water**
 - **Use cloth filters to protect yourself and family for dracunculiasis**
 - **Vector control with Abate**
 - **Advocacy for provision / rehabilitation of sources of drinking water and monitoring progress**

Number of Cases of Dracunculiasis: 1989 - 2001

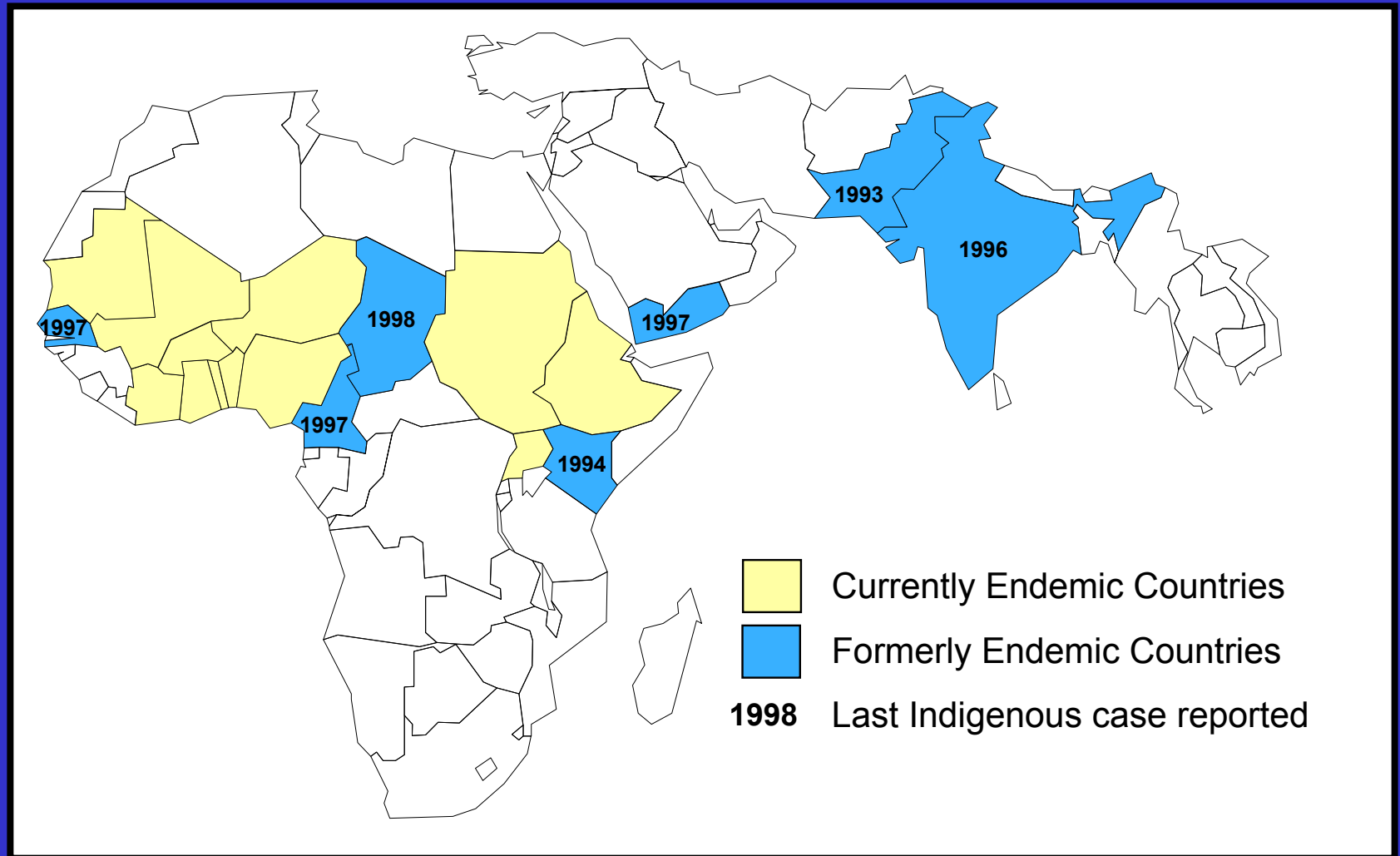


Number of Villages with Endemic Dracunculiasis: 1989 - 2001

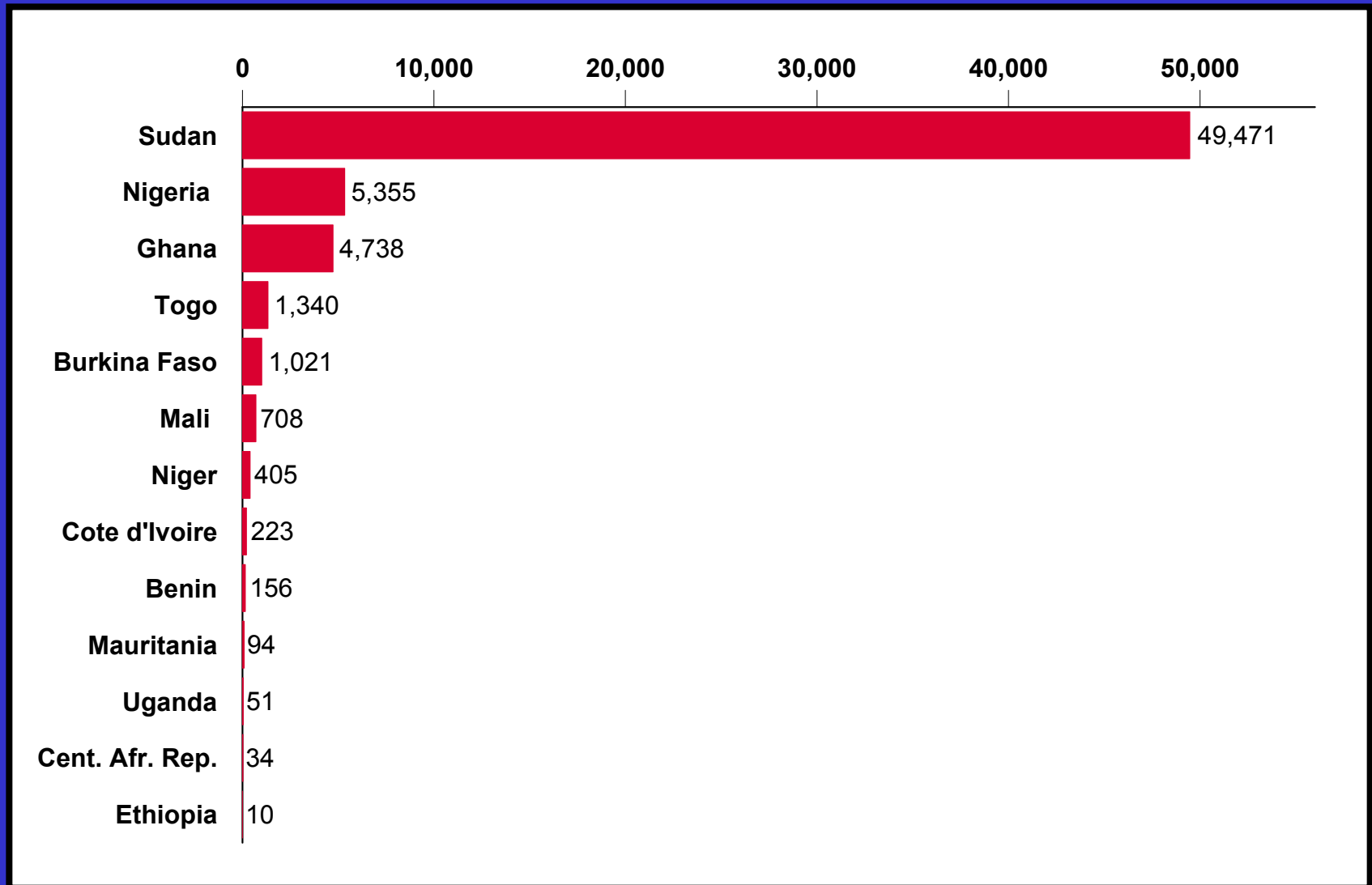


Dracunculiasis Eradication Campaign

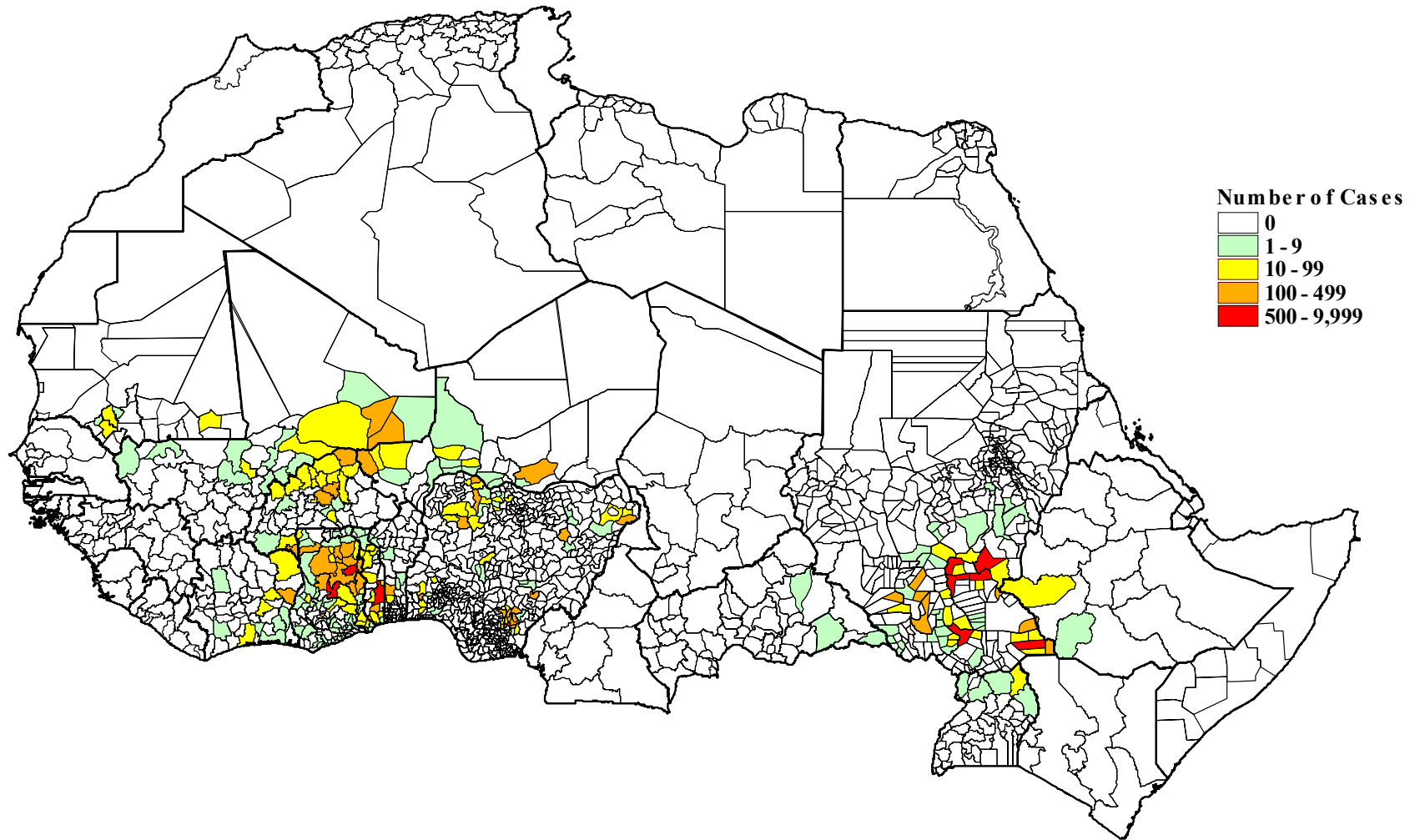
Status of Eradication Efforts: 2001



Distribution by Country of 63,606 Indigenous Cases of Dracunculiasis Reported during 2001



Distribution of 63,710 Cases of Dracunculiasis in 2001*



* provisional

Coalition of Organizations and Agencies Supporting the Global Campaign to Eradicate Dracunculiasis

Lead Organizations

The Carter Center
Centers for Disease
Control & Prevention

UN Organizations

UNICEF
WHO
UNDP
The World Bank

Bilateral Donors

United States
Japan
Netherlands
Norway
United Arab
Emirates
Saudi Arabia
Sweden
Canada
Finland
United Kingdom
Denmark
Spain

Industry

E.I. DuPont de Nemours
Precision Fabrics Group
American Cyanamid
BASF
Johnson & Johnson

Supporting Organizations

US Peace Corps
Keidanren
The Hilton Foundation
Health & Development
International
The Bill and Melinda
Gates Foundation

