

OFDA
Disaster
Case Reports

Zaire Ebola Fever Epidemic
September 1976

Office of U.S. Foreign Disaster Assistance
Agency for International Development
Washington, D. C. 20523

ZAIRE - Ebola Fever Epidemic

Data

Date: September 1976 (FY 77)

Location: Equateur Region, Mongala Sub-region, zone of Bumba; onset at Yambuku about 90 km. north of the town of Bumba; spread limited to area about 50 km. in all directions from Yambuku

No. Dead: 245

No. Cases: 262

The Disaster

During the fall of 1976, hundreds of people died of what was suspected to be Marburg or "Green Monkey" disease in northern Zaire and southern Sudan. The first probable case in Zaire was admitted to the Yambuku Mission hospital on September 5, 1976, and died two days later. In the next five weeks 13 members of the Mission got sick and died. The outbreak reached a peak during the last week in September when at least 43 villages located within 50 km. of Yambuku reported from one to 20 cases. Zairian Public Health Officers carried out the first epidemiological investigations on the disease when they were alerted on about September 15. The World Health Organization (WHO) was then called in and took the lead in organizing efforts to control the epidemic and in investigating its causes. A team of experts from WHO and the U.S. Centers for Disease Control (CDC) finally diagnosed the illness as a unique viral strain which they named Ebola after the river in Zaire.

A concerted surveillance program was initiated by an International Commission to canvas the affected areas. In addition to Zairian physicians and epidemiologists and a WHO consultant virologist, medical personnel from Belgium, France, Canada, the U.S., the Institut de Medecine Tropicale d'Anvers, the South African Institute for Medical Research, and the London School of Hygiene and Tropical Medicine made up a task force of about 15 professionals. From October 15 to December 15 the Commission conducted epidemiological surveys and implemented containment measures in Kinshasa and the Bumba-Yambuku area. The last reported death occurred on November 5, 1976.

Action Taken by the Government of Zaire (GOZ)

The first epidemiological investigations were carried out by officers of the GOZ Public Health Ministry. By the first week in October, however, GOZ had notified WHO and requested help. A strict sanitary cordon had been

ZAIRE - Ebola Fever Epidemic

instituted by the GOZ during the first week of October to hinder the spread of the disease. During the program of surveillance and control, the GOZ furnished logistic support in the form of personnel. The value of this in-country aid was approximately \$242,400.

Assistance Provided by the United States Government (USG)

On October 30, 1976, the U.S. Ambassador declared the epidemic to be of disaster proportions and donated \$25,000 to support the surveillance and epidemiological investigations of the International Commission. On November 24, 1976, in response to a Mission request for more funds, the U.S. Office of Foreign Disaster Assistance (OFDA) approved an additional \$50,000 for administrative costs; on December 24, 1976, OFDA approved \$30,000 more to bring the total of in-country Mission funding for assistance to.....\$105,000

The Centers for Disease Control in Atlanta, besides providing six technical advisors, furnished approximately \$115,000 of direct support in the form of scientific and medical supplies and equipment. OFDA also provided miscellaneous supplies (cots, blankets, tents, water jugs, flashlights, cooking sets, etc.) at a cost, including inland freight, of \$6,914.....\$121,914

A Peace Corps laboratory technician who came down with a fever thought to be the Ebola virus was evacuated on November 30 to Johannesburg by a U.S. Air Force C-141. Although the illness subsequently proved not to be due to the Ebola virus, the incident provided an opportunity to test the emergency evacuation plan for team members.....\$57,786*

TOTAL \$284,700

* \$786 was carried over into FY 1978.

Assistance Provided by U.S. Voluntary Agencies

Two Peace Corps volunteers worked with the field investigation group in the Bumba area - one as a laboratory technician at the Yambuku Hospital, and a second, who was familiar with the area, with the organization of the epidemiological surveillance network.

ZAIRE - Ebola Fever Epidemic

In-country U.S. Church Missions provided many valuable services. Doctors and nurses from the Protestant Mission at Karawa, Equateur Region, furnished four-wheel drive vehicles and doctor/nurse teams for epidemiological investigations in the Bumba area. The Protestant and Catholic Missions' radio network facilitated field communications.

Assistance Provided by the International Community **

International Organizations

WHO - services of a short-term virologist from the Pasteur Institute in Paris; services of the resident advisor in epidemiology, part time services of the Resident Representative, and a laboratory technical advisor; value estimated at \$150,000 for expert services, equipment, supplies, and operational costs; UNDR0 sponsored an appeal on behalf of WHO to help defray costs

Governments

Belgium - services of 5 medical advisors; administrative and laboratory support; provision of transportation (Landrovers), equipment, and supplies; valued at \$135,000

Canada - contributed \$88,000 in cash to WHO for operational costs (in response to UNDR0 appeal); donated 2 isolators, spare parts, and service technicians at a cost of \$14,000

France - provided technical advisors and field laboratory equipment valued at \$40,000

Great Britain - dispatched five doctors and one nurse, laboratory support, and three isolators at cost of \$25,000

Netherlands - contributed \$50,000 to UNDR0 for WHO operational expenses. (Money contributed to UNDR0 for WHO is accounted for under WHO.)

South Africa - sent epidemiological consultant to Kinshasa for three weeks with unspecified quantity of immune plasma, and offered hospitalization for any sick members of WHO field teams; value - \$38,000.

TOTAL \$402,000

ZAIRE - Ebola Fever Epidemic

** Please note: the figure for total international assistance is an approximation. In many cases the cash value of in kind aid is unavailable.