

Emerging Infectious Disease Repository

EIDR combines a curated, expansive and transparent repository of information on past emerging infectious disease events occurring between 1940 and 2013 with a user-friendly, interactive web application built to disseminate and discuss this information.

View the application at eidr.ecohealth.io



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Image: Bubonic plague, Yersinia pestis (green) in the digestive system of a rat flea (brown). Courtesy of B. Joseph Hinnebusch, Elizabeth Fischer and Austin Athman, National Institute of Allergy and Infectious Diseases, National Institutes of Health

The EIDR repository contains 369 EID events. For each EID event, data were collected on a set of variables chosen by EcoHealth Alliance experts and designed to capture critical spatial, temporal, clinical, epidemiologic, economic, pathogen, host, and zoonotic information. This project builds upon previous work at EcoHealth Alliance, like the ‘hotspots’ map published by Jones et al., in 2008 in the journal Nature.¹

Users can interact with EIDR in a variety of ways. The web application enables users to compare multiple EID events simultaneously, visualize historical disease emergence spatially, explore individual emergence events in depth, and comment on emergence events. Each EID event has a unique event page that contains a narrative abstract, tables of data pertaining to the event, a map of the event’s location, and an interactive discussion board.

EIDR is powerful information sharing platform dedicated to EID. The combination of EIDR’s EID event repository with a complex web application makes EIDR a unique and valuable tool for the study of EID.

¹Jones KE, Patel NG, Levy MA, Storygard A, Balk D, Gittleman JL, Daszak P (2008) Global Trends in Emerging Infectious Diseases. Nature. Vol. 451:990-993.

Ebola virus

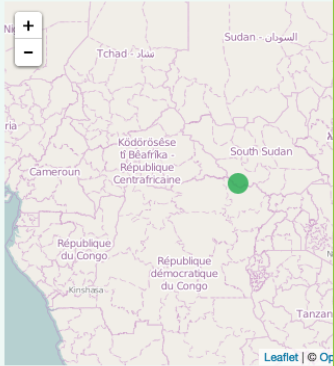
Disease: Ebola Hemorrhagic Fever

Approximate date: 1976

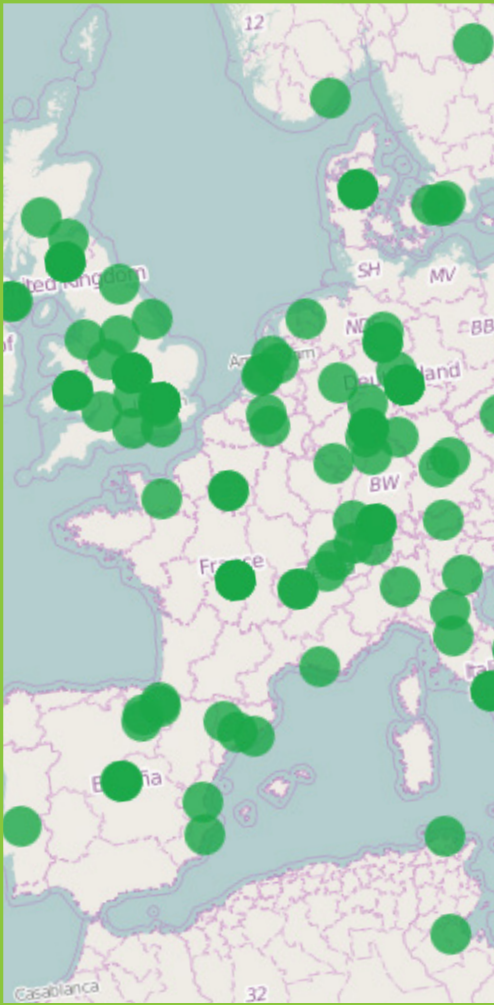
Between June and November 1976 a deadly outbreak of Ebola hemorrhagic fever infected 284 people living in southern Sudan. A total of 151 people died. Patients presented with fever, headache, joint and muscle pain, diarrhea, vomiting, chest-pain, pain and dryness of the throat, rash and hemorrhagic manifestations. The index case was a storekeeper in a cotton factory located in the small town of Nzara. The patient became ill on June 27, 1976, and died on July 6. The virus was transmitted within the factory and to family members through close contact with acutely ill patients. The outbreak spread to Maridi after a patient from Nzara was admitted to a hospital there. A large outbreak subsequently occurred in the hospital due to nosocomial transmission. Fruit bats are the natural hosts of the virus, although this was unknown at the time of the event. Proximity to wildlife likely drove the emergence of this virus into the human population.

Emergence Type	Driver	Infected	Deaths
expanding host range, evolution of an existing organism	ecosystem change, proximity to wildlife	284	151

Event Transmission	Zoonotic Type	Host
 	zoonotic from wildlife	fruit bats, primates, other mammals



Location: Nzara
*This represents the most specific location information found



Event Name ^	Disease	Type of Emergence	Event Transmission
Clostridium difficile BI/NAP1 (Pennsylvania, USA, 2001)	Infection due to Clostridium difficile	Expanding region, new drug resistance, increasing virulence	Nosocomial
Clostridium difficile Clindamycin-Res (NY, USA, 1989)	Infection due to Clostridium difficile, colitis	Increasing virulence	Nosocomial
Coccidioides immitis (California, USA, 1990)	Coccidioidomycosis	Increasing incidence	Airborne
Corynebacterium diphtheriae (Russia, 1985)	Diphtheria	Reappearance after control or elimination	Close
Corynebacterium jeikeium (USA, 1970)			
Corynebacterium jeikeium Ciprofloxacin-	Septicemia	New drug resistance	Nosocomial