

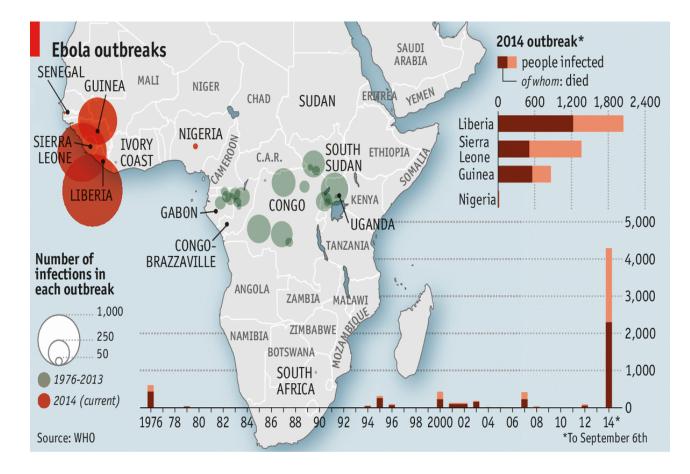
- 0. SOURCE of EBOLA VIRUS Story Preface
- 1. A TEACHER in YAMBUKU GETS SICK
- 2. A DEADLY, UNKNOWN DISEASE
- 3. DISCOVERING the EBOLA VIRUS
- 4. INVESTIGATING the EBOLA VIRUS
- 5. UNDERSTANDING and NAMING the EBOLA VIRUS

6. SOURCE of EBOLA VIRUS

- 7. EBOLA TODAY AIDED by SOCIAL DISTANCING
- 8. FUTURE of EBOLA

Despite decades of research, scientists still do not know, for sure, the source of Ebola. Questions like these still have no definitive answers:

- Where did the Ebola virus actually originate?
- Is there a primary carrier?
- Did the virus jump species?
- If so, from what to what?



One thing scientists have learned. The outbreaks in Sudan and Zaire, in 1976, were coincidental and likely unrelated. Both sub-types of Ebola, however, spread exactly the same way via:

• Personal contact, especially in hospitals and clinics, via Ebola-infected bodily fluids, tissues, organs and blood;

SOURCE of EBOLA VIRUS



When is someone able to spread the disease to others?

Ebola only spreads when people are sick. A patient must have symptoms to spread the disease to others.



- Cleansing and handling the bodies of people who had died from Ebola; and
- Using unsterilized syringes in medical facilities.

In Yambuku, the "Disease Cowboys" determined that between 300 to 600 people per day shared the same five needles during the height of the Ebola epidemic. Individuals visiting the Mission Hospital with minor complaints, who got a shot to help them, may have left with the deadly virus in their bloodstream.

Scientists are still puzzling over fundamental questions about Ebola's source. When the virus first appeared in Africa, researchers tested many different animals. They were trying to determine whether Ebola has a non-human reservoir.

What the virus hunters initially learned, coupled with recent scientific studies, is interesting:

- Mosquitoes, the source of deadly illness like malaria and yellow fever, seem free of Ebola;
- Non-human primates for example, gorillas, chimpanzees and monkeys seem susceptible to the Ebola virus;
- Forest antelopes and porcupines also seem susceptible;
- The susceptible animals appear able to transmit the virus to human beings.

Mabalo Lokela purchased, and ate, fresh (and smoked) antelope meat just before he became ill. As the "index patient" in the 1976 Yambuku epidemic, did Lokela contract the virus from the antelope? Medical researchers cannot definitely answer that question.

In addition, Mabalo and another Ebola patient handled fresh monkey meat before they both became ill. Did they contract the virus from the monkey meat? Scientists also cannot definitely answer that question.

Monkeys were at the core of another Ebola scare in 1989. A group of 100 crab-eating macaques (*Macaca fascicularis*) were sent to a quarantine lab in Reston, Virginia from a facility in Manilla (the Philippines). Intended for a research project, the monkeys were dying; some had died en route. Researchers determined the monkeys had a highly lethal form of Ebola, now known as *Ebola-Reston*.

Although the monkeys died, none of their human handlers contracted Ebola (although some of them developed antibodies specific to this Ebola sub-type).

In subsequent years, the same export facility sent monkeys to labs in America and Italy with the same results. The presence of Ebola in Asian monkeys is very worrisome to medical researchers. They have a key question:

Where else in the world is Ebola circulating in the wild, waiting to jump species? (Disease, by Mary Dobson - an Oxford scholar who also authored The Oxford Illustrated History of Western Medicine - at page 186.)

See Alignments to State and Common Core standards for this story online at:

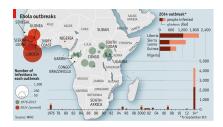
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SOURCE of EBOLA VIRUS

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