

PERSON OF THE YEAR

TIME

Ebola Diagnostic and Surveillance in West Africa

19 July 2016

THE EBOLA FIGHTERS

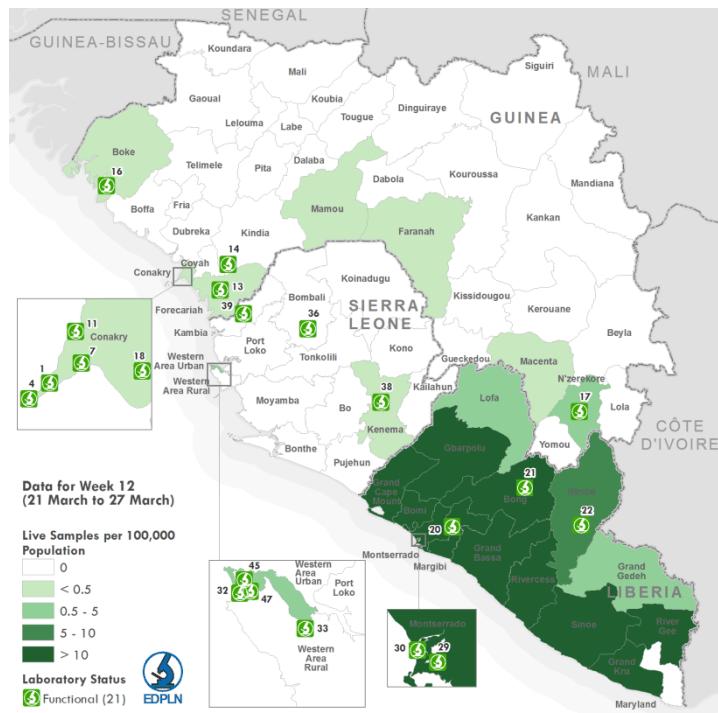
Dr. Jerry Brown

The Liberian surgeon,
46, turned his hospital's
chapel into an Ebola

SAND2016-5823C

- Public Health Emergency of International Concern lifted 29 March 2016
 - 28,616 confirmed, probable, suspected cases
 - 11,310 deaths
 - >10,000 survivors
- WHO declared end of the (last) outbreak in Guinea and Liberia on 1 June and 9 June 2016 respectively (42 days since last negative)

- Initial diagnosis difficult
 - New to West Africa
 - Malaria or yellow fever
- Remote areas difficult to reach
 - Initial cases went undiagnosed for months
 - Mysterious disease realized in December 2013 but not diagnosed as Ebola until March 2014
 - Initially thought to be cholera (symptomology)



http://apps.who.int/ebola/sites/default/files/thumbnails/image/sitrep_lab_alive_lab_locations_22.png?ua=1

International Partners

- External capacity required for diagnostics and treatment
- England, France, WHO, MSF, EU, United States, Canada, S. Africa, Nigeria, China, Russia, and other countries and agencies

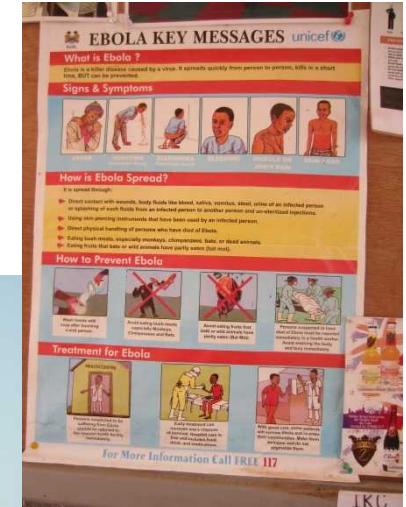


Ebola Treatment Centers



Efforts

- Signs
- Call Centers
- Posters
- Music



Surveillance

- Community engagement
 - Disbelief and rumors
 - Ebola isn't real
 - White people started the outbreak
 - Fearful
 - Hide from surveillance teams
 - Refuse to go to ETC
 - Culture
 - Natural healers
 - Voodoo
 - Burials
 - Try to smuggle corpses out of areas using taxis and cars
- Surveillance
 - Contact tracing
 - Identifying the people requiring tracing
 - Not necessarily conducted face to face
 - Quarantine and enforcement
 - Escape quarantine

Diagnostics

- Samples
 - Documentation (Patient information)
 - Same names
 - Unique patient identification numbers
 - » Implemented more than a year after the outbreak started
 - » Not implemented consistently
 - Transported to lab days after collection
 - Cold chain
 - Unreliable transportation
 - Sample distribution
- Diagnostics
 - Supply chain
 - Getting supplies into the country
 - Sharing supplies between labs
 - Different diagnostic tests
 - Results reporting and contact tracing follow up

Surveillance Continuum

- Recognize there is a problem
- Diagnose
 - Sample collection
 - Transportation to laboratory with capacity
 - Differentials
 - Results reporting
- Outbreak control measures
 - Identify the potential for transmission
 - Contact tracing
 - Treatment
- Follow up

