

Department of Defense Armed Forces Health Surveillance Center West Africa Ebola Surveillance Summary (2 JUL 2015)



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DEPARTMENT OF DEFENSE (AFHSC)

West Africa Ebola Surveillance Summary #106

2 JUL 2015 (next report 9 JUL 2015)



CASE REPORT: Since the previous summary (25 JUN), there has been an increase of 25 confirmed and 59 suspected and/or probable Ebola virus disease (EVD) cases, (+13 total deaths), bringing the total to 27,575 cases (11,245 deaths). Liberia, Guinea and Sierra Leone reported new confirmed cases during this time period. The total case count includes past cases and deaths from Italy, Senegal, Nigeria, the United States, Spain, Mali, and the United Kingdom.

On a 29 JUN 2015, the [Liberia MOH reported](#) that a swab sample from the body of a 17 year-old male tested positive for Ebola virus - the country's first confirmed case since Liberia was declared free of the disease on 9 MAY and its first new case since 20 MAR. Officials are investigating how he contracted Ebola and contact tracing is underway. Liberia has quarantined the Nedowein area of Margibi County where the boy died on 28 JUN. The area is located 30 miles south of the capital, Monrovia. It is not near borders with Sierra Leone or Guinea. The MOH reported [two additional confirmed cases](#) in the same town where the 17-year-old lived.

According to [WHO](#) for the week ending 28 JUN, Guinea reported 12 new confirmed cases; the same as the previous week. Ten of the 12 cases reported were registered contacts. The cases were reported from the prefectures Boke, Conakry, and Forecariah. Sierra Leone reported eight confirmed cases in the week ending 28 JUN; the same as the previous week. Four of the eight cases were registered contacts of a previous case. Three districts reported cases: Port Loko, Kambia, and Western Area Urban.

On 10 APR, WHO's fifth Emergency Committee meeting on the 2014 EVD outbreak [unanimously agreed](#) that the outbreak continues to constitute a Public Health Emergency of International Concern (PHEIC) and that all previous recommendations remain in effect with some additions. [The committee will met again on 2 JUL.](#)

DoD SURVEILLANCE GUIDELINES: On 31 OCT 2014, the Under Secretary of Defense for Personnel and Readiness (USD(P&R)) [issued a memorandum](#) providing guidance for training, screening, and monitoring for DoD personnel deployed to Ebola outbreak areas. The USD(P&R) also published electronic versions of the [Ebola risk evaluation form](#) (DD2990) and [redeployment risk assessment form](#) (DD2991). On 28 MAY 2015, the Armed Forces Health Surveillance Center published [updated guidelines](#) for the detection and reporting of DoD cases of EVD.

MEDICAL COUNTERMEASURES: There are no approved vaccines or specific treatments for EVD. On 9 DEC 2014, [HHS offered liability protections](#) to drug makers developing Ebola vaccines. A comparison of the six Ebola vaccines being actively tested can be found on page 4 of this report, along with the current pharmaceutical treatments. Testing of ChAd3-EBOZ has expanded to [Uganda](#) and Nigeria according to the Walter Reed Army Institute of Research. The PREVAIL vaccine trials [completed](#) phase II in Liberia on 30 APR. As of 24 JUN, the [STRIVE vaccine trial](#) is being administered in areas of ongoing transmission in Port Loko and Western Area Urban, Sierra Leone. A new article in Science Translational Medicine describes a [screen](#) performed in the quest to identify currently approved drugs with anti-Ebola activity. Chinese drug MIL77, used on the recent EVD case in Italy and the U.K., is a near copy of the drug ZMapp. The Chinese medical company which produces MIL77, Beijing Mabworks, stated they have a licensing agreement with the intellectual property right holder for ZMapp. NIH will start a [clinical trial](#) of Zmapp in Coyah and Forecariah, Guinea during JUL 2015.

Links to Additional Sections of this Report

DoD, USG and Global Response & Travel Advisories	Latest Case Counts	Medical Countermeasures in Development
New Cases (Last 21 days) by Admin Area (map)	New Confirmed Cases with Trend Line	Additional Resources

Text updated from the previous report will be printed in red; items in (+xx) represent the change in number from the previous AFHSC summary (25 JUN 2015).

All information has been verified unless noted otherwise. Sources include WHO, HHS, CDC, and health agencies in Guinea, Liberia, and Sierra Leone.

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DoD RESPONSE: As of 11 JUN, the 48th Chemical, Biological, Radiological, and Nuclear Brigade [completed their mission](#) as the joint forces' headquarters element providing oversight duties in Liberia. No DoD personnel are currently deployed in West Africa for the Ebola response; support efforts have [transitioned](#) to USAID, NIH, and CDC personnel.

On 8 JAN 2015, SECDEF signed a memo delegating authority to use DoD aircraft to transport Ebola symptomatic or exposed DoD personnel. On 17 DEC 2014, the CJCS issued an updated [CJCSI 4220.01A](#), implementing SECDEF's 21-day controlled monitoring policy. As of 18 MAY, controlled monitoring is not required for DoD personnel returning from Liberia; as it is no longer an area of widespread EVD transmission. On 7 NOV 2014, [DoD issued guidance](#) on medical care of DoD civilians deployed to Ebola outbreak areas.

FDA has issued [Emergency Use Authorizations \(EUA\)](#) for several in vitro diagnostics for detection of Ebola virus. Under the EUAs, the DoD EZ1 real time RT-PCR Ebola Zaire virus detection assay developed by USAMRIID is approved for human diagnostic testing at the following DoD labs: USAMRIID, Landstuhl RMC, NIDDL at NMRC, NHRC, NAMRU-3, NAMRU-6, William Beaumont AMC, Carl R. Darnall AMC, Madigan AMC, Tripler AMC, and SAAMC. In Liberia, the Navy's mobile lab and the USAMRIID-supported Liberian Institute for Biological Research in Monrovia are qualified to perform Ebola diagnostic testing on U.S. personnel. Joint Base Langley-Eustis, Carl R. Darnall AMC, Wright-Patterson MC, WRNMMC, SAAMC, Madigan AMC, Womack AMC, Landstuhl RMC, Eisenhower AMC, and NIDDL have been approved as BioFire NGDS BT-E Assay testing sites. **The Corgenix [ReEBOV](#) Rapid Antigen Test was approved under the EUA on 24 FEB and on 25 JUN, [The Lancet published](#) a point-of-care field validation study of the test.** As of 24 MAR, Cepheid [announced](#) that it received an EUA from the Food and Drug Administration for its Xpert Ebola molecular diagnostic test that gives results within two hours; it requires the use of Cepheid's GeneXpert bench top system.

USG AND GLOBAL RESPONSE: Current information and guidance is available at the [CDC](#) and [WHO](#) Ebola web sites. On 19 JUN, CDC released [HAN 00381](#), 'Clinical Considerations for the Evaluation of Ill Travelers from Liberia to the United States' in order to advise medical personnel of important diseases, other than Ebola, for these travelers. Additional resources for assessing patients and discharging persons under investigation can be found on CDC's [website for U.S. healthcare workers](#).

TRAVEL ADVISORY: The CDC is maintaining its [Warning - Level 3, Avoid Nonessential Travel](#) advisory for Guinea and Sierra Leone. On 4 MAY, Liberia's travel advisory was reduced to a [Warning - Level 2, Practice Enhanced Precautions](#) since there are presently no known cases of Ebola in Liberia. [All flights carrying travelers from the affected West African nations](#) must enter the U.S. through one of the five designated airports that are conducting enhanced screening for EVD (JFK, Newark Liberty, Washington Dulles, Chicago O'Hare, and Atlanta Hartsfield-Jackson). U.S. military aircraft do not need to be re-routed to one of these airports, provided that Customs and Border Protections has been assured that the established DoD screening protocols will take place at the arrival location. On 28 OCT 2014, the CDC recommended that state public health departments [implement active post-arrival monitoring for 21 days](#) along with other movement restrictions based on a traveler's exposure risk category using CDC definitions. As of 17 JUN, this restriction only applies to passengers from Sierra Leone or Guinea. The CDC has [relaxed screening procedures](#) for passengers traveling from Liberia to the United States; for these travelers, airport temperature checks and the requirement for active monitoring were immediately discontinued. Personal health check kits (CARE kits) are still being distributed to these travelers.

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All information has been verified unless noted otherwise. Sources include DoD, White House Press Office, WHO, CDC, and USAID DART team.



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Latest Available Ebola Case Counts in or Related to West Africa, 2014-2015

Country (as of date)	EVD Cases All / Lab Confirmed	Deaths All / Lab Confirmed	EVD Cases in HCW / Deaths	Contacts Being Followed
Guinea (1 JUL)	3,745 (+27) / 3,277 (+13)	2,450 (+10) / 2,040 (+3)	191 (+2) / 96 (+2)	2,107
Sierra Leone (1 JUL)	13,125 (+54) / 8,668 (+9)	3,933 (+2) / 3,567 (+2)	305 / 221	1,447
Liberia (2 JUL)	10,669 (+3) / 3,154 (+3)	4,807 (+1) / NA	378 / 192	>100
Italy (10 JUN)	1 / 1***	0 / 0	1 / 0***	0
United Kingdom (22 JAN)	1 / 1***	0 / 0	1 / 0***	0
United States (4 DEC)	4 / 4* **	1 / 1	3 / 0	0
Mali (21 DEC)	8 / 7	6 / 5	2 / 2	0
Nigeria (17 SEP)	20 / 19	8 / 7	11 / 5	0
Senegal (20 SEP)	1 / 1*	0 / 0	0 / 0	0
Spain (2 DEC)	1 / 1	0 / 0	1 / 0	0
Total	27,575 (+84) / 15,133 (+25)	11,245 (+13) / 5,620 (+5)[†]	893 (+2) / 516 (+2)	>3,654

Case Fatality Proportion: In its 1 JUL Situation Report WHO said the case fatality proportion in the two intense-transmission countries among cases for whom a definitive outcome is recorded is between 46% and 64%. [†]Excluding Liberia / *Imported from Liberia / **1 imported from Guinea / ***Imported from Sierra Leone / NA = Not Available

Shaded rows represent countries which have been declared Ebola transmission-free by WHO.

The total number of cases is subject to change due to reclassification, retrospective investigation, consolidation of cases and laboratory data, and enhanced surveillance.

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Ebola Medical Countermeasures In Development, 2014-2015

Name	Type	Company	Testing Location	FDA Status
ChAd3-EBO Z	Vaccine	GlaxoSmithKline partnered with NIAID	Liberia , Guinea, Uganda , Nigeria, Sierra Leone , Ghana , Mali, Senegal, Cameroun	Phase 2/3
rVSV-ZEBOV	Vaccine	Public Health Agency Canada/ Newlink Genetics Corp partnered with Merck	Liberia , Guinea , Sierra Leone , Kenya	Phase 2/3
Ebola Ad26, MVA-BN-filo	Vaccine	Johnson & Johnson with Bavarian Nordic A/S	Britain	Phase 2
Ebola GP Vaccine	Vaccine	Novavax, Inc.	Australia	Phase 1
MVA Ebola Zaire Vaccine	Vaccine	Oxford University, GlaxoSmithKline, Emergent BioSolutions	Britain	Phase 1 (new study)
Ad5-EBOV , Zaire Ebola 2014 strain	Vaccine	Beijing Institute of Biotechnology, Jiangsu Province CDCP	China	Phase 1
rVSV-ZEBOV (second generation rVSV-ZEBOV)	Vaccine	University of Texas- Galveston and Profectus Biosciences	United States	Animal testing
Favipiravir	Drug	Toyama Chemical	Guinea	Phase 2
Brincidofovir	Drug	Chimerix, Inc.	Liberia	Halted/ cancelled
ZMapp	Drug	Mapp Pharmaceuticals	Liberia , Sierra Leone , Guinea (pending approval)	Phase 2
TKM-Ebola-Guinea	Drug	Tekmira Pharmaceuticals	Guinea, Sierra Leone	Phase 2 (halted)
BCX4430	Drug	BioCryst Pharmaceuticals partnered with NIH, HHS	United States	Phase 1
MIL77	Drug	Beijing Mabworks	United Kingdom , Italy	NA
Convalescent Plasma Therapy	Procedure	ClinicalRM with multiple partners	Liberia, Guinea, Sierra Leone	Phase 1/2

All information has been verified unless noted otherwise. Sources include WHO, NIAID, CDC, FDA, NIH, and open source news.



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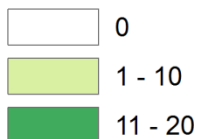
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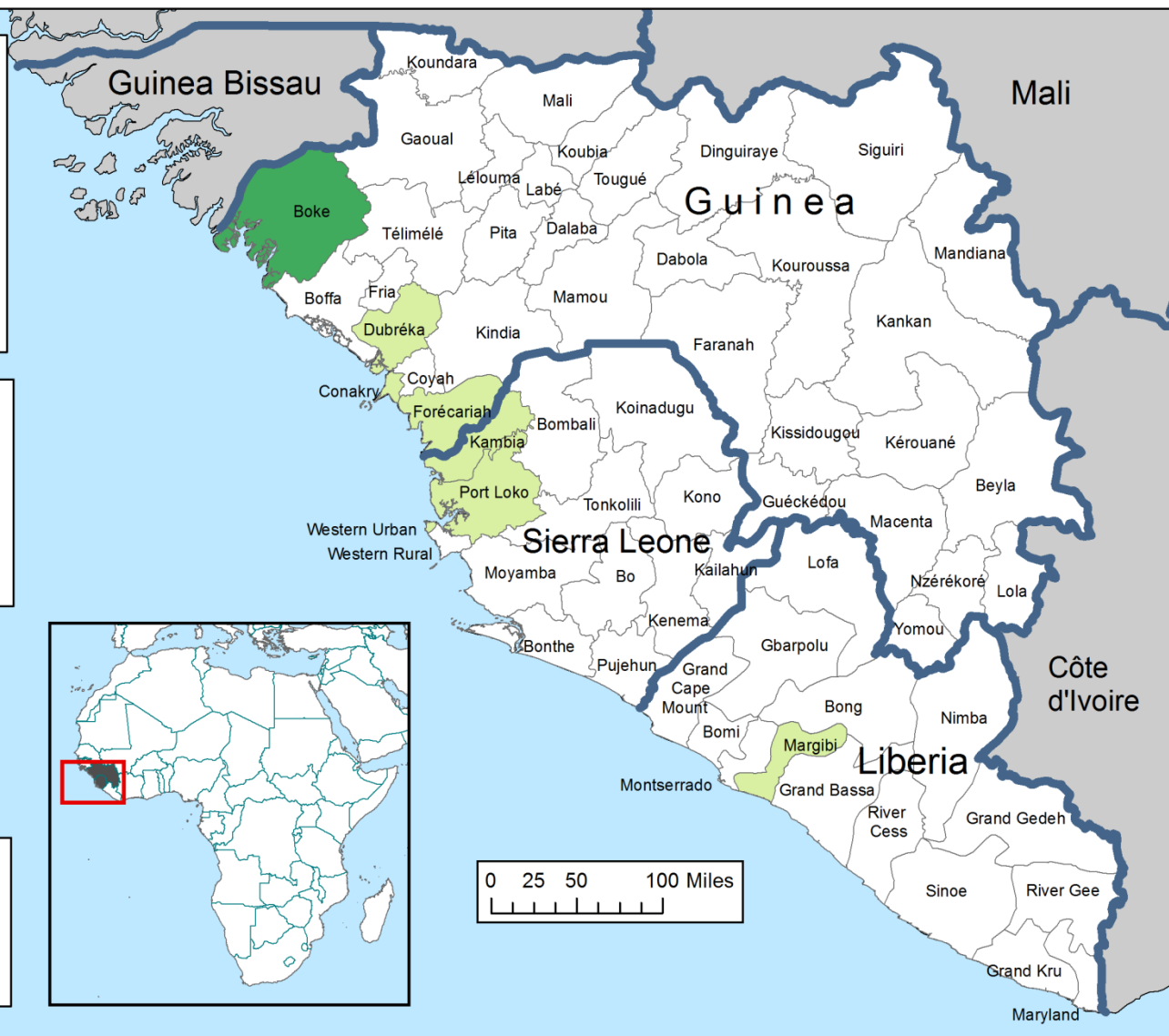


New confirmed Ebola virus disease cases by district in West Africa, during the most recently reported three-week period

New Confirmed Cases



As of dates:
Guinea, 10 JUN - 1 JUL
Sierra Leone, 10 JUN - 1 JUL
Liberia, 10 JUN - 1 JUL



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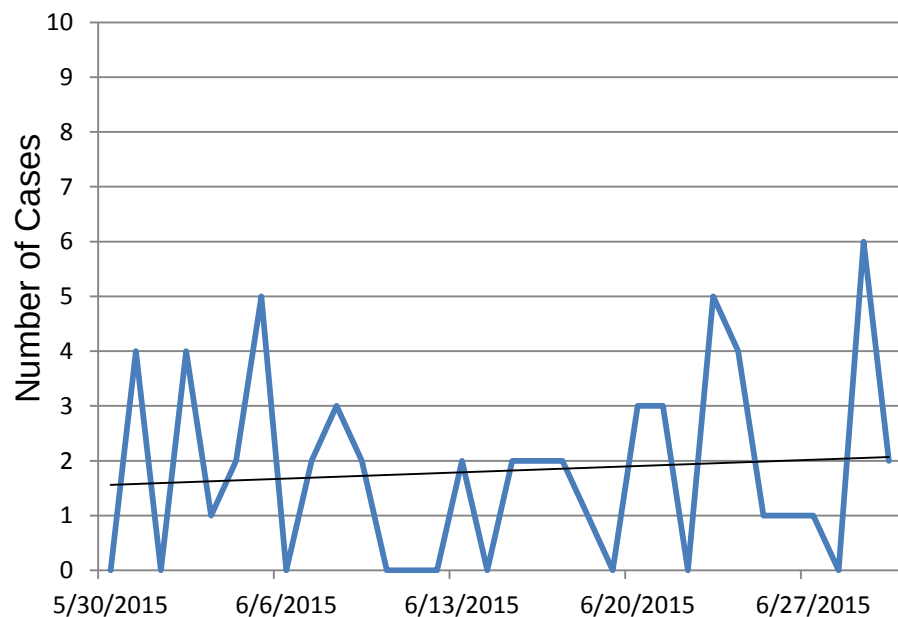
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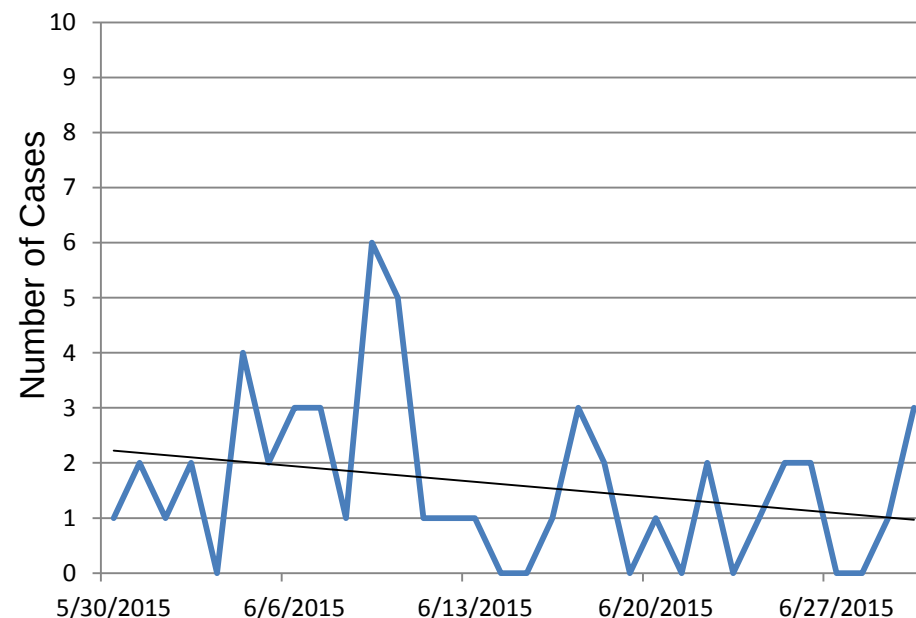


Daily Reported Confirmed EVD Cases with Trend Line for Guinea and Sierra Leone as of 30 JUN 2015 for the Previous Month

Guinea



Sierra Leone



All information has been verified unless noted otherwise. Sources include WHO, and the Guinea and Sierra Leone Ministries of Health.

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Additional Resources and Media Reports

Ebola Web Sites

- [WHO](#)
- [WHO \(Africa\)](#)
- [CDC](#)
- [UNMEER Sit Reps](#)
- [Liberia MOH](#)
- [Sierra Leone MOH](#)
- [Humanitarian Response \(West Africa\)](#)
Access to MOH, WHO, UN, and other reports
- [AFHSC Guidelines for Detecting and Reporting DoD Cases of Ebola Virus](#)
- [USAMRIID](#)
- [State Department Travel Site](#)
- [USAID Ebola Site](#)
- [DoD News](#)
- [DoD Operation United Assistance Web Portal](#)
- [AFRICOM Operation United Assistance Web Portal](#)

Information and News

- [Liberia investigating animal link after Ebola re-emerges](#) (Reuters, 2 JUL)
- [Liberia confirms third Ebola case in new outbreak](#) (Fox News, 2 JUL)
- [Guinea quarantines coastal towns to end Ebola](#) (Voice of America, 27 JUN)
- [ReEBOV Antigen Rapid Test kit for point-of-care and laboratory-based testing for Ebola virus disease: a field validation study](#) (The Lancet, 25 JUN)
- [Distinct lineages of Ebola virus in Guinea during the 2014 West African epidemic](#) (Nature, 24 JUN)
- [Malaria killed more people than usual in Ebola outbreak](#) (AP, 23 JUN)
- [Ebola returns to Sierra Leone capital after three-week gap](#) (Reuters, 22 JUN)
- [Clinical trial of experimental Ebola drug is halted](#) (NY Times, 19 JUN)
- [Liberia: New disease control center to develop Ebola response model](#) (AllAfrica, 18 JUN)
- [Temporal and spatial analysis of the 2014-2015 Ebola virus outbreak in West Africa](#) (Nature, 17 JUN)
- [Ebola vaccines in limbo expose need for more speed in trials](#) (Reuters, 17 JUN)
- [Study finds Ebola virus mutated slower than first thought](#) (Reuters, 17 JUN)
- [Sierra Leone imposes Ebola curfew for northern districts](#) (NY Times, 12 JUN)