

West Africa Ebola Surveillance Summary #48 7 NOV 2014 (next report 10 NOV 2014)



CASE REPORT: Since the previous summary (5 NOV), there has been an increase of 78 confirmed, suspected, and probable Ebola virus disease (EVD) cases (+47 deaths), bringing the total to 13,120 cases (5,245 deaths) in Guinea, Liberia, Sierra Leone, Senegal, Nigeria, United States, Spain, and Mali. Spain is expected to be declared free of Ebola transmission on 17 NOV.

Over the most recent three-week period with available data, total cases have increased 48% in Liberia (ending 3 NOV), 46% in Sierra Leone (ending 2 NOV), and 19% in Guinea (ending 3 NOV). As a comparison, during the three week period ending on 25 SEP, the three-week increase in reported cases was 91% for Liberia, 62% for Sierra Leone and 33% for Guinea. However, the accuracy and completeness of case reporting is unknown. Ebola coordinators from the UN, Liberia, and Guinea expressed the perception that the number of new confirmed cases is slowly declining and there may be a trend downward in the epidemic. WHO, UN officials and US officials have warned that it is too early to say the epidemic has peaked and that underlying problems still exist.

DoD SURVEILLANCE GUIDELINES: On 20 OCT, AFRICOM updated their EVD screening process for returning troops (see page four). On 31 OCT, the Under Secretary of Defense (USD) for Personnel and Readiness <u>issued a memorandum</u> providing guidance for training, screening, and monitoring for DoD personnel deployed to Ebola outbreak areas. USD also published electronic versions of the <u>Ebola risk evaluation form</u> (DD2990) and <u>redeployment risk assessment form</u> (DD2991). On 17 OCT, the Armed Forces Health Surveillance Center published updated <u>guidelines for the detection and reporting of DoD cases of EVD.</u>

RISK TO DoD PERSONNEL: On 21 OCT, NCMI published (U//FOUO) Worldwide: Airborne Ebola Transmission Extremely Unlikely (CAC required). NCMI assesses there is significant risk to U.S. military medical personnel who care for critically ill Ebola patients or handle patients or samples without essential barrier precautions; risk to non-medical DoD personnel is low provided there is no contact with sick people or infected animals.

MEDICAL COUNTERMEASURES: There are no approved vaccines or drug treatments for EVD. The WHO said on 28 OCT that two vaccines will begin small safety and immunogenicity trials during the week of 1 NOV with results expected in DEC 2014, followed by large-scale field testing in West Africa in JAN 2015. One of the vaccines was developed by GlaxoSmithKline with the U.S. National Institute of Allergy and Infectious Diseases and the other by Public Health Canada and licensed to NewLink Genetics. The WHO, with Guinea, Sierra Leone and Liberia, is also developing the capacity to collect and use convalescent sera from recovered Ebola patients to experimentally treat ill patients in West Africa. Four drug candidates, ZMapp, TKM-Ebola, brincidofovir, and favipiravir, have been used in Ebola patients in the U.S. and Europe. A fifth drug, BCX4430 (Biocryst Pharmaceuticals) shows promise against filoviruses, including Ebola, in nonhuman primate testing at USAMRIID.

Links to Additional Sections of this Report				
DoD, USG and Global Response, and Travel Advisories	Latest Available Case Counts	Cases by Admin Area (map)		
Percent Change In Cases (map)	Cumulative Case Graph	Additional Resources		



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DoD RESPONSE: More than 1,300 of 4,000 planned DoD personnel have arrived in West Africa for the Ebola response. DoD currently plans to build at least 12 ETUs. In Liberia, two Ebola testing laboratories manned by personnel from the U.S. Naval Medical Research Center are fully operational. DoD will establish one mobile laboratory in each of the following Liberian counties: Nimba, Sinoe, Grand Kru, and Maryland, to speed up diagnostics. The 25-bed hospital built by the DoD for health workers and staffed by Public Health Service (PHS) personnel should be operational on 8 NOV 2014. PHS personnel are expected to be in country for a total of six months. On 7 NOV, the CJSC issued CJCSI 4220.01, implementing SECDEF Hagel's 21-day controlled monitoring policy. The policy lays out who is affected and how the monitoring will be conducted, including naming seven monitoring sites: Ft. Bliss, TX; JB Langley-Eustis, VA; Ft. Hood, TX; Ft. Bragg, NC; and JB Lewis-McCord, WA in CONUS and, pending host country approval, USAG Baumholder, Germany and Caserma Del Din, Vicenza, Italy.

DoD continues to plan for and work on PPE procurement and the establishment of DoD MTF Ebola beds at four CONUS DoD facilities (Walter Reed, Portsmouth, Ft. Bragg, and Wright-Patterson). DoD is also working on collaborative infection control training with CDC for Liberia and on a policy for DoD aircraft movement of Ebola patients. AFRICOM is working closely with TRANSCOM on the operational evacuation plan, and JFC is synchronizing efforts in Liberia for ETU staff training/needs, patient transport issues, and lab specimen collection for ETUs. In response to a request by the Department of Health and Human Services, DoD has established a 30-person expeditionary medical support team that could provide short-notice assistance to civilian medical providers in the United States. DoD has established a public Operation United Assistance web portal.

FDA issued an Emergency Use Authorization (EUA) on 5 AUG for the use of the DoD Ebola Zaire RT-PCR assay developed by USAMRIID. USAMRIID, Landstuhl RMC, NIDDL at NMRC, NHRC, NAMRU-3, William Beaumont AMC, and the Navy's two mobile labs in Liberia are the only DoD labs qualified to perform Ebola human diagnostic testing. The USAMRIID-supported Liberian Institute for Biological Research in Monrovia, Liberia can also perform the test. The test is produced by the Navy Medical Research Center through JPEO's Critical Reagents Program. On 25 OCT, the FDA approved the addition of two new assays, BioFire Defense FilmArray NGDS BT-E and BioFire Defense FilmArray Biothreat-E test, to the EUA for in vitro diagnostics for the detection of Ebola virus. On 30 OCT, NCMI published an assessment of experimental vaccines.

USG AND GLOBAL RESPONSE: Current information and guidance is available at the <u>CDC's</u> and <u>WHO's</u> Ebola web sites.

CDC published a new Q&A on infection control in countries with widespread Ebola transmission, resources for parents, schools and pediatricians plus interim guidance on residence decontamination for EVD and removal of waste. The CDC has also distributed patient management algorithms for ambulatory care facilities and emergency departments.

TRAVEL ADVISORY: The U.S. Secretary of Homeland Security announced on 21 OCT that 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 Hartsfield-Jackson Atlanta). On 28 OCT, the CDC recommended that state public health departments begin direct active post-arrival monitoring for 21 days along with other movement restrictions based on a traveler's exposure risk category using new CDC definitions. CDC updated its Warning - Level 3, Avoid Nonessential Travel advisory for Guinea, Sierra Leone, and Liberia on 21 OCT. On 28 AUG, Department of State issued an alert warning U.S. citizens of screening procedures, travel restrictions, and reduced aviation transportation options in response to the outbreak. Many major and regional airlines have discontinued or curtailed flights to and from Guinea, Liberia, and Sierra Leone. There are currently no travel warnings for Nigeria, Mali, and Senegal.

Text updated from the previous report will be printed in red; items in (+xx) represent the change in number from the previous AFHSC summary. (5 NOV 2014)



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

Country (as of date)	EVD Cases All / Lab Confirmed	Deaths All / Lab Confirmed	Case Fatality Proportion All / Lab Conf.	Contacts Being Followed
Guinea (3 NOV)	1,760 (+29) / 1,479 (+22)	1,054 (+13) / 850 (+13)	60% / 57%	3,234
Liberia (3 NOV)	6,574 (+49) / 2,472 (+21)	2,731 (+34)† / NA	42% / NA	7,048
Sierra Leone (2 NOV)	4,759 / 4,057	1,450 / 1,085	30% / 27%	14,137
Nigeria (17 SEP)	20 / 19	8/7	40% / 37%	0
Senegal (20 SEP)	1 / 1*	0/0	0% / 0%	0
United States (6 NOV)	4 / 4* **	1/1	25% / 25%	16
Spain (31 OCT)	1 / 1	0/0	0% / 0%	0
Mali (4 NOV)	1 / 1**	1/1	100% / 100%	108
Total	13,120 (+78) / 8,034 (+43)	5,245 (+47) / 1,944 (+13)†	40% / 35%†	24,543

† Excluding Liberia from change in lab confirmed deaths and lab confirmed CFP. / *Imported from Liberia / ** Imported from Guinea

The case fatality proportions (CFP) calculated from these data are confounded by many factors and may not accurately reflect true CFPs. WHO published a CFP (Case Fatality Rate, CFR, in their report) for all hospitalized cases in Guinea, Liberia, Sierra Leone, and Nigeria between 23 MAR and 14 SEP 2014 and estimated the CFP for that population at 64.3% (95% CI: 61.5-67.0).

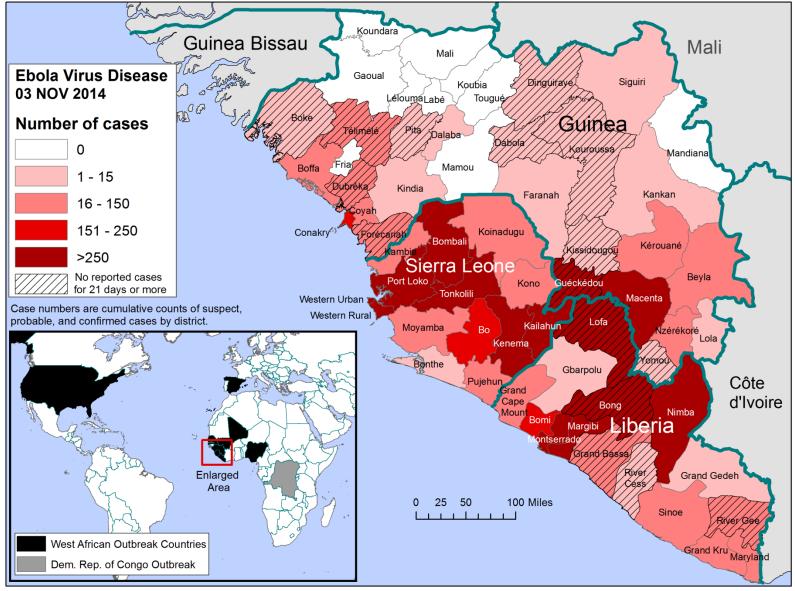
The total number of cases is subject to change due to reclassification, retrospective investigation, consolidation of cases and laboratory data, and enhanced surveillance.

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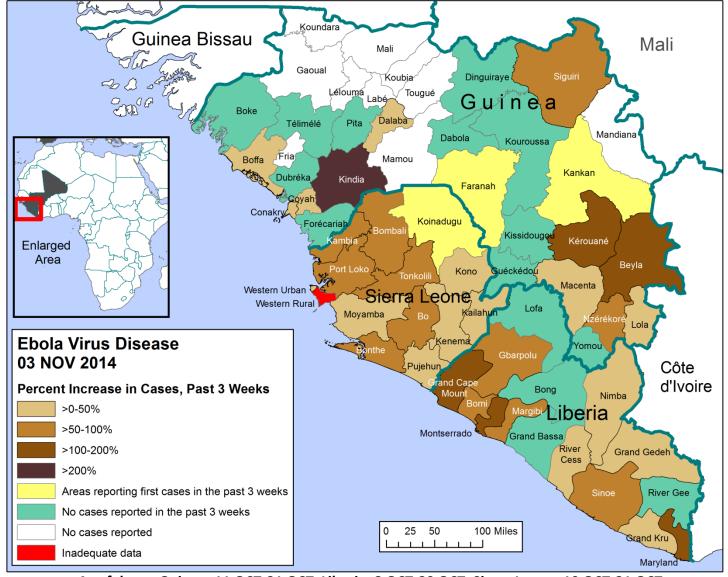






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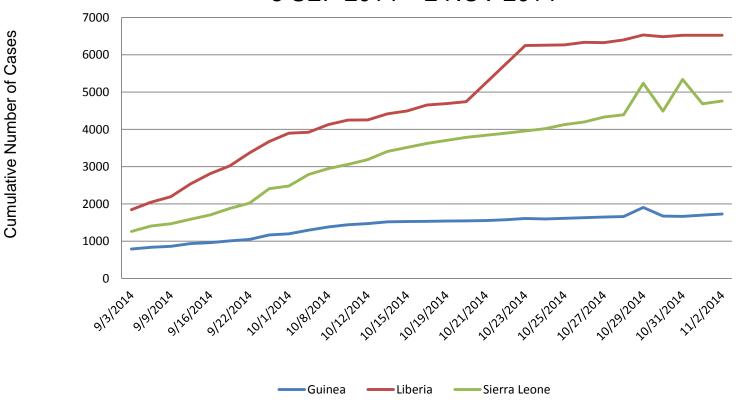
As of dates: Guinea, 11 OCT-31 OCT; Liberia, 8 OCT-29 OCT; Sierra Leone, 10 OCT-31 OCT Data for Western Rural, Sierra Leone was missing for one third of this reporting period.



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Cumulative Number of Confirmed, Probable, or Suspected Cases of Ebola Virus Disease in West Africa 3 SEP 2014 – 2 NOV 2014



Cases reported in Senegal, Nigeria, Spain, Mali and the U.S. are not included in the graph. The total number of cases may vary weekly due to reclassification, retrospective investigation, consolidation of cases and laboratory data, and enhanced surveillance.

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

For questions or comments, please contact: usarmy.ncr.medcom-afhsc.list.dib.alert-response@mail.mil



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Additional Resources and Media Reports

Ebola Web Sites

- WHO
- WHO (Africa)
- CDC
- <u>Liberia MOH</u>
- <u>Humanitarian Response (West</u>
 <u>Africa)</u> Access to MOH, WHO, UN,
 and other reports
- French Embassy Conakry
- NCMI (CAC required)
- USAMRIID
- State Department Travel Site
- USAID Ebola Site
- DoD News
- <u>DoD Operation United Assistance</u>
 Web Portal
- AFRICOM Operation United Assistance Web Portal

Information and News

- <u>Ebola treatment unit for medical workers to open</u> (Army Public Affairs, 6 NOV)
- New study sheds light on the importance of supportive care for Ebola patients (WHO, 6 NOV)
- Clinical presentation of patients with Ebola virus disease in Conakry, Guinea (NEJM, 5 NOV)
- <u>Ebola virus disease in West Africa Clinical manifestations and management</u> (NEJM, 5 NOV)
- As Ebola infections drop, Liberian capital reawakens (Washington Post, 6 NOV)
- <u>Ebola surging in Sierra Leone amid lack of treatment centers: U.N</u> (Reuters, 5 NOV)
- West African leaders name Togo's president to lead Ebola response (Reuters, 5 NOV)
- U.S. Ebola researchers plead for access to samples (Reuters, 5 NOV)
- Ebola hits health care access for other diseases (AP, 4 NOV)
- Thousands break Ebola quarantine to find food (AP, 4 NOV)
- <u>As Ebola declines in Liberia, health officials reassess response plans</u> (The Washington Post, 3 NOV)
- France takes in UNICEF worker with Ebola (AP, 2 NOV)