

Department of Defense Armed Forces Health Surveillance Center West Africa Ebola Surveillance Summary (19 MAR 2015)



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



DEPARTMENT OF DEFENSE (AFHSC)

West Africa Ebola Surveillance Summary #91

19 MAR 2015 (next report 26 MAR 2015)



CASE REPORT: Since the previous summary (12 MAR), there has been an increase of 104 confirmed and 72 suspected and/or probable Ebola virus disease (EVD) cases, (+168 total deaths), bringing the total to 24,701 cases (10,194 deaths). The new cases and deaths are reported from Guinea, Liberia, and Sierra Leone. Liberia has reported no confirmed EVD cases since 19 FEB and as of 5 MAR has no hospitalized cases. The total includes past cases and deaths from Senegal, Nigeria, the United States, Spain, Mali, and the United Kingdom; the [United Kingdom](#) was declared EVD-free on 10 MAR. The [UK reported on 12 MAR](#) that one of its soldiers, a health care worker, was diagnosed with EVD in Sierra Leone and was flown to London for treatment. [On 13 MAR, an American healthcare worker was returned via non-commercial air transport to the NIH Clinical Center for treatment after testing positive for EVD in Sierra Leone.](#) Seventeen contacts of this case have [returned](#) to the U.S. for monitoring as of 18 MAR; so far no additional positive cases are reported by CDC.

According to WHO's 18 MAR 2015 [situation report](#), in the week ending 15 MAR confirmed case incidence in Guinea rose from 58 in the prior week to 95 cases, while Sierra Leone reported a decrease from 58 to 55 cases. In Guinea, the relatively low proportion of new cases among known contacts, the relatively high proportion of EVD-positive deaths occurring in the community, and the ongoing practice of unsafe burials indicate continued difficulties engaging effectively with affected communities. [The last EVD patient in Liberia tested negative on 3 MAR. If no new confirmed cases are detected, Liberia can be declared EVD-free on 14 APR.](#) Additionally, 11 new health care worker (HCW) infections were reported in the week ending 15 MAR.

On 20 JAN 2015, WHO's fourth 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 temporary recommendations remain in effect with some additional advice.

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 5 JAN 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. Of [four drug candidates](#), ZMapp, TKM-Ebola, brincidofovir, and favipiravir, the latter two started [trials in West Africa](#) in JAN 2015. An official trial of ZMapp has [started in Liberia](#); NIAID is negotiating to extend the trial into Sierra Leone in order to enroll the 200 patients needed for the study. WHO, with Guinea, Sierra Leone, and Liberia, continues to develop capacity to collect and use convalescent sera from recovered Ebola patients to experimentally treat ill patients in West Africa. A comparison of the four Ebola vaccines being actively tested can be found on page 4 of this report, along with the current pharmaceutical treatments. WHO, with the Guinean Ministry of Health, Médecins Sans Frontières (MSF), Epicentre, and The Norwegian Institute of Public Health (NIPH), will launch a Phase III trial in Guinea on 7 March to test the VSV-EBOV vaccine for efficacy in preventing Ebola. WHO approved the [first rapid test for Ebola](#), developed by Corgenix; it is reportedly easy to perform, requires no electricity and gives a result within 15 minutes. Stada, a German pharmaceutical firm, [will launch a new test](#) for Ebola in MAR 2015; tests will be distributed to aid organizations in West Africa.

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 (12 MAR 2015).

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

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DoD RESPONSE: DoD Press Secretary Admiral Kirby said on 27 FEB 2015, “We’ve got about 1,180 Department of Defense personnel in the area of operations in Liberia, and we expect that they’ll start to [deploy home](#) probably in April.” On 11 FEB, President Obama said that approximately 100 DoD personnel would remain as the response transitions to support provided mostly by civilian employees of government agencies and volunteers. In Liberia, three USG supported laboratories will reportedly retain full operations (the Liberian Institute of Biomedical Research in Margibi, Cuttington University in Bong, and the ELWA facility in Montserrado). DoD has completed and transferred to USAID all ten planned ETUs. **The 48th Chemical, Biological, Radiological, and Nuclear Brigade will deploy to Liberia, replacing the 101st Airborne Division as the joint forces’ headquarters element, to provide oversight duties.**

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. The updated 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, plus USAG Baumholder, Germany and Caserma Del Din, Vicenza, Italy, OCONUS. 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 FilmArray NGDS BT-E Assay testing sites. The Corgenix ReEBOV Rapid Antigen Test was the most recent assay approved under the EUA on 24 FEB. The Roche [LightMix® Ebola Zaire rRT-PCR Test](#) was approved for the presumptive detection of Ebola Zaire virus in individuals with signs and symptoms of Ebola disease, on 23 DEC 2014.

USG AND GLOBAL RESPONSE: Current information and guidance is available at the [CDC](#) and [WHO](#) Ebola web sites. On 11 FEB, the White House press office released a [fact sheet](#) outlining the international and domestic efforts made in response to Ebola in the U.S. and West Africa. **On 18 MAR, WHO published the first of the “Ebola Diaries,” a series of firsthand accounts written by scientists and healthcare workers involved in the early days of the current Ebola epidemic. On 15 MAR, the CDC released a [press statement](#) on the EVD-positive American physician undergoing treatment at the NIH Clinical Center.**

TRAVEL ADVISORY: The CDC is maintaining its [Warning - Level 3, Avoid Nonessential Travel](#) advisory for Guinea, Sierra Leone, and 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 [begin direct active post-arrival monitoring for 21 days](#) along with other movement restrictions based on a traveler’s exposure risk category using CDC definitions. On 20 JAN 2015, WHO reaffirmed the need to avoid unnecessary interference with international travel and trade.

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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 (15 MAR)	3,389 (+83) / 2,966 (+80)	2,224 (+45) / 1,829 (+45)	178 (+5) / 91 (+1)	2,548
Liberia (15 MAR)	9,526 (+19) / 3,150	4,264 (+87) / NA	372 / 180	0
Sierra Leone (15 MAR)	11,751 (+74) / 8,487 (+24)	3,691 (+36) / 3,325 (+36)	302 (+7) / 221	8,115
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	24,701 (+176) / 14,636 (+104)	10,194 (+168) / 5,167 (+81) [†]	870 (+12) / 499 (+1)	10,663

Case Fatality Proportion: As of 18 MAR 2015, the WHO said the case fatality rate in the three intense-transmission countries among cases for whom a definitive outcome is recorded is between 50% and 65%. For hospitalized patients, the case fatality rate is 50% in Guinea, 50% in Liberia, and 65% in Sierra Leone.

[†]Excluding Liberia / *Imported from Liberia / **1 imported from Guinea / ***Imported from Sierra Leone / NA = Not Available

Shaded countries 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
cAd3-EBO Z	Vaccine	GlaxoSmithKline partnered with NIAID	Liberia, Guinea (WHO)	Phase 2/3
VSV-ZEBOV	Vaccine	Public Health Agency Canada/Newlink Genetics Corp partnered with Merck	Liberia, Guinea , Sierra Leone	Phase 2/3
Ebola Ad26, MVA-BN-filo	Vaccine	Johnson & Johnson partnered with Bavarian Nordic A/S	Britain	Phase 1
Ebola GP Vaccine	Vaccine	Novavax, Inc.	Australia	Phase 1
MVA Ebola Zaire Vaccine	Vaccine	Oxford University, GlaxoSmithKline, NIAID	Britain	Phase 1
Favipiravir	Drug	Toyama Chemical	Guinea	Phase 2
Brincidofovir	Drug	Chimerix, Inc.	Liberia	Halted/ cancelled
ZMapp	Drug	Mapp Pharmaceuticals	Liberia	Phase 2
TKM-Ebola	Drug	Tekmira Pharmaceuticals	Guinea, Sierra Leone	Phase 2
Hemopurifier	Device	Aethlon Medical, Inc.	Nebraska Medical Center , Ebola Unit	Emergency Use
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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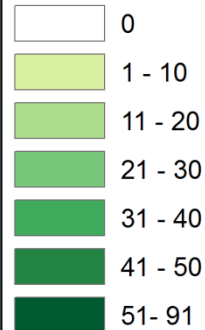
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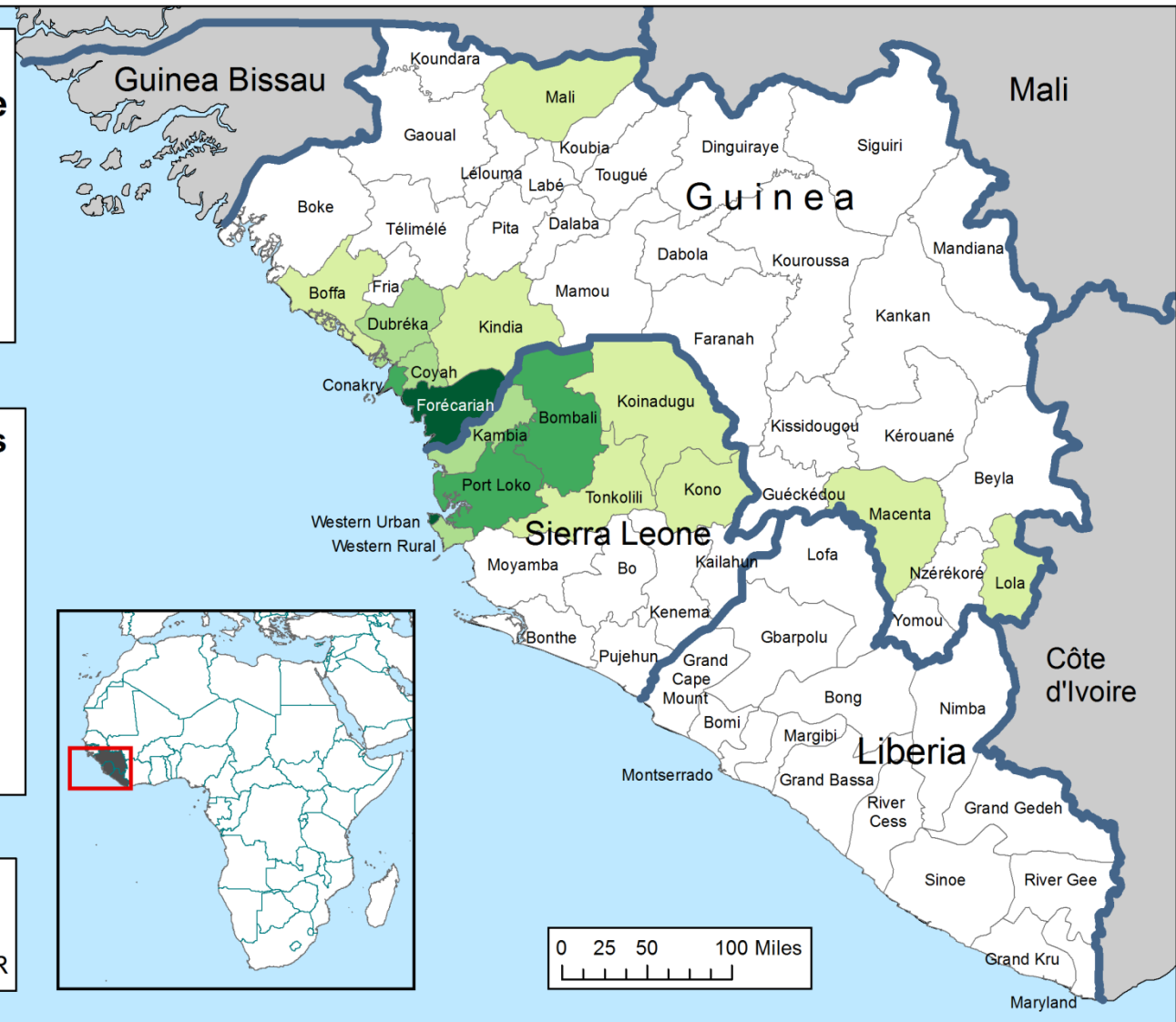


New confirmed Ebola virus disease cases by district in West Africa, during the most recently reported three-week period

New Confirmed Cases



As of dates:
Guinea, 16 FEB - 9 MAR
Liberia, 19 FEB - 12 MAR
Sierra Leone, 22 FEB - 15 MAR



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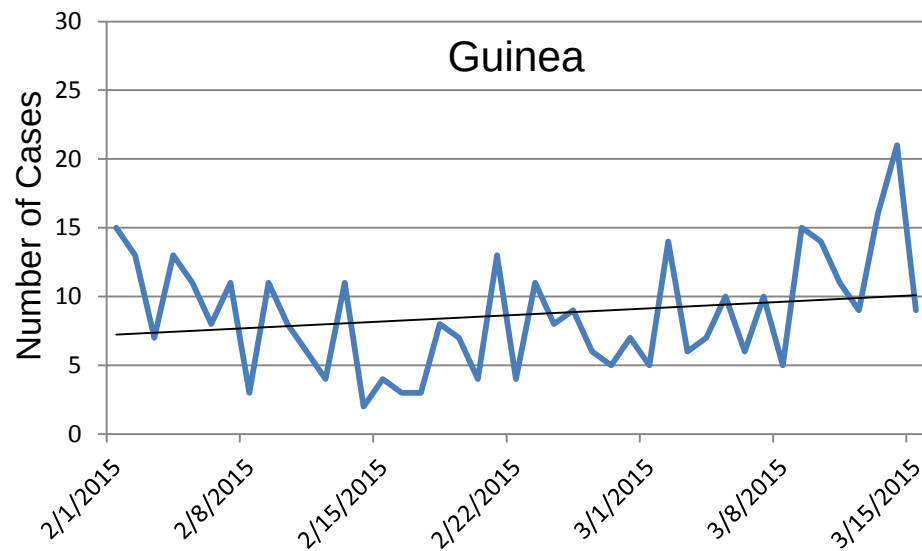
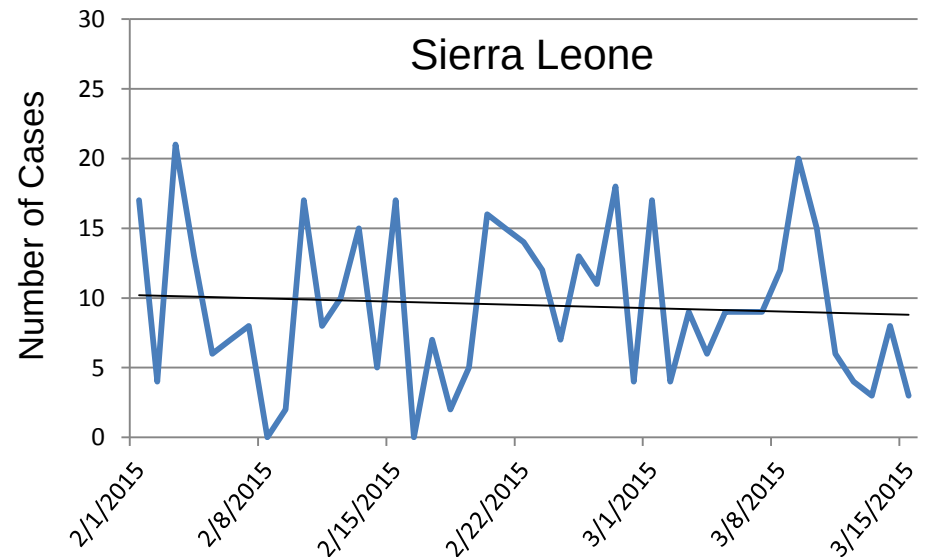
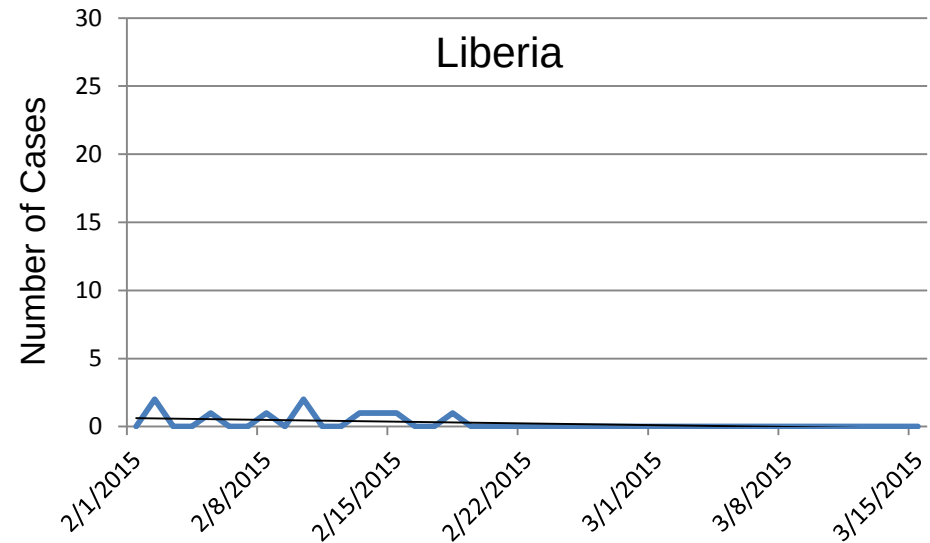
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Daily Reported Confirmed EVD Cases, with Trend Line, for Guinea, Liberia, and Sierra Leone



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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](#)
- [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

- [Two more U.S. healthcare workers repatriated for Ebola monitoring](#) (Reuters, 19 MAR)
- [In Sierra Leone, Ebola virus means 'school is not safe'](#) (BBC News, 19 MAR)
- [FDA panel to discuss Ebola vaccine development in May](#) (Reuters, 18 MAR)
- [Sierra Leone plans another three-day, countrywide shutdown to stop Ebola's spread](#) (U.S. News and World Report, 18 MAR)
- [Liberians worry Ebola could return from Guinea, Sierra Leone](#) (Voice of America, 18 MAR)
- [Resistance, size of population slow Ebola efforts in Guinea, CDC director says](#) (Washington Post, 13 MAR)
- [Ebola: British patient has been evacuated from Sierra Leone](#) (BBC, 12 MAR)
- [Trial of Tekmira's TKM-Ebola treatment starts in Sierra Leone](#) (Reuters, 11 MAR)
- [External panel to review WHO Ebola response](#) (CIDRAP, 10 MAR)
- [Body mounts 'robust' immune response in the face of Ebola](#) (LA Times, 10 MAR)
- [Ebola leaves ongoing health issues for survivors of the viral disease](#) (Washington Post, 9 MAR)
- [Liberian government closes crematorium in sign of Ebola progress](#) (PBS News Hour, 8 MAR)