

# Department of Defense Armed Forces Health Surveillance Center West Africa Ebola Surveillance Summary (18 JUN 2015)



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# DEPARTMENT OF DEFENSE (AFHSC)

## West Africa Ebola Surveillance Summary #104

### 18 JUN 2015 (next report 25 JUN 2015)



**CASE REPORT:** Since the previous summary (11 JUN), there has been an increase of 18 confirmed and 44 suspected and/or probable Ebola virus disease (EVD) cases, (+12 total deaths), bringing the total to 27,342 cases (11,185 deaths). Only Guinea and Sierra Leone reported new confirmed cases during this time period. The total case count includes cases and deaths from Liberia, Italy, Senegal, Nigeria, the United States, Spain, Mali, and the United Kingdom.

According to [WHO reporting](#) for the week ending 14 JUN, Guinea reported 10 new confirmed cases; down from 16 in the prior week. The cases were reported from four prefectures: Boke, Conakry, Dubreka, and Forecariah. Community engagement continues to pose a challenge to control efforts. Only five of the 10 cases reported were registered contacts; both cases from Boke and two of three cases from Forecariah had unknown sources of infection. Sierra Leone reported 14 confirmed cases in the week ending 7 JUN; down from 15 cases in the prior week. Two districts reported cases: Port Loko and Kambia. All 14 cases reported from Sierra Leone in the week ending 14 June can be traced back to the secret movement of cases, contacts, and the burials of EVD-related deaths during APR 2015. Several cases in both Guinea and Sierra Leone are from unknown sources of infection. Two response teams from Guinea-Bissau have been deployed to the border with Guinea to assess several points of entry and sensitize communities. To date, no EVD cases have ever been identified in Guinea-Bissau.

WHO [declared](#) Liberia EVD free on 9 MAY 2015, as 42 days have passed since the burial of the last confirmed case.

On 10 APR 2015, 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 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 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. On 12 MAY, WHO Assistant Director-General for Health Systems and Innovation, Dr. Kienny, said it would be difficult to prove the efficacy of the two vaccines (rVSV-ZEBOV and ChAd3-EBO Z) due to a low number of EVD positive cases. A new article in Science Translational Medicine describes a [drug 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.**

#### Links to Additional Sections of this Report

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

Text updated from the previous report will be printed in red; items in (+xx) represent the change in number from the previous AFHSC summary (11 JUN 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:** 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. As of 20 MAR, the 48<sup>th</sup> Chemical, Biological, Radiological, and Nuclear Brigade [replaced](#) the 101<sup>st</sup> Airborne Division as the joint forces' headquarters element providing oversight duties. In Liberia, one USG supported laboratory, the Liberian Institute of Biomedical Research in Margibi, remains operational. On 30 APR, the Monrovia Medical Unit was formally closed by the Liberian government.

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. 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. As of 13 MAY, CDC changed Liberia's [country classification](#) to "country with former widespread EVD transmission and current, established control measures". WHO started efforts on 18 MAY to set up a \$100 million [emergency fund](#), financed by voluntary contributions, to ensure resources are available to mount the initial response to any future epidemics like the current Ebola outbreak. On 26 MAY, WHO Assistant Director General Alyward reported that the organization is \$100 million short of its \$350 million projected budget needed to respond to the Ebola outbreak over the next six months. The UN Mission for Ebola Emergency Response (UNMEER) will be [closing](#) its Ebola response headquarters in Accra, Ghana at the end of JUN 2015.

**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 (16 JUN)	3,675 (+5) / 3,246 (+5)	2,445 (+8) / 2,026 (+7)	187 / 94	1,927
Sierra Leone (14 JUN)	12,965 (+57) / 8,649 (+13)	3,919 (+4) / 3,553 (+4)	304 / 221	443
Liberia (17 MAY)	10,666 / 3,151	4,806 / NA	378 / 192	0
Italy (19 MAY)	1 / 1***	0 / 0	1 / 0***	19
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
<b>Total</b>	<b>27,342 (+62) / 15,080 (+18)</b>	<b>11,185 (+12) / 5,592 (+11)†</b>	<b>888 / 514</b>	<b>2,370</b>

**Case Fatality Proportion:** In its 17 JUN Situation Report WHO said the case fatality proportion in the three 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 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
ChAd3-EBO Z	Vaccine	GlaxoSmithKline partnered with NIAID	<a href="#">Liberia</a> , Guinea, <a href="#">Uganda</a> , Nigeria, <a href="#">Sierra Leone</a> , <a href="#">Ghana</a> , Mali, Senegal, Cameroun	Phase 2/3
rVSV-ZEBOV	Vaccine	Public Health Agency Canada/ Newlink Genetics Corp partnered with Merck	<a href="#">Liberia</a> , <a href="#">Guinea</a> , <a href="#">Sierra Leone</a> , <a href="#">Kenya</a>	Phase 2/3
Ebola Ad26, MVA-BN-filo	Vaccine	Johnson & Johnson with Bavarian Nordic A/S	<a href="#">Britain</a>	Phase 2
Ebola GP Vaccine	Vaccine	Novavax, Inc.	<a href="#">Australia</a>	Phase 1
MVA Ebola Zaire Vaccine	Vaccine	Oxford University, GlaxoSmithKline, Emergent BioSolutions	<a href="#">Britain</a>	<a href="#">Phase 1</a> (new study)
<a href="#">Ad5-EBOV</a> , Zaire Ebola 2014 strain	Vaccine	Beijing Institute of Biotechnology, Jiangsu Province CDCP	<a href="#">China</a>	<a href="#">Phase 1</a>
rVSV-ZEBOV (second generation rVSV-ZEBOV)	Vaccine	University of Texas- Galveston and Profectus Biosciences	<a href="#">United States</a>	Animal testing
Favipiravir	Drug	Toyama Chemical	<a href="#">Guinea</a>	Phase 2
Brincidofovir	Drug	Chimerix, Inc.	<a href="#">Liberia</a>	Halted/ <a href="#">cancelled</a>
ZMapp	Drug	Mapp Pharmaceuticals	<a href="#">Liberia</a>	Phase 2
TKM-Ebola-Guinea	Drug	Tekmira Pharmaceuticals	Guinea, <a href="#">Sierra Leone</a>	<a href="#">Phase 2</a> (resumed)
BCX4430	Drug	BioCryst Pharmaceuticals partnered with NIH, <a href="#">HHS</a>	<a href="#">United States</a>	Phase 1
<b>MIL77</b>	<b>Drug</b>	<a href="#">Beijing Mabworks</a>	<a href="#">United Kingdom</a> , <b>Italy</b>	<b>NA</b>
Convalescent Plasma Therapy	Procedure	<a href="#">ClinicalRM</a> 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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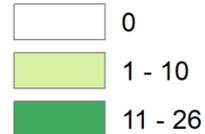
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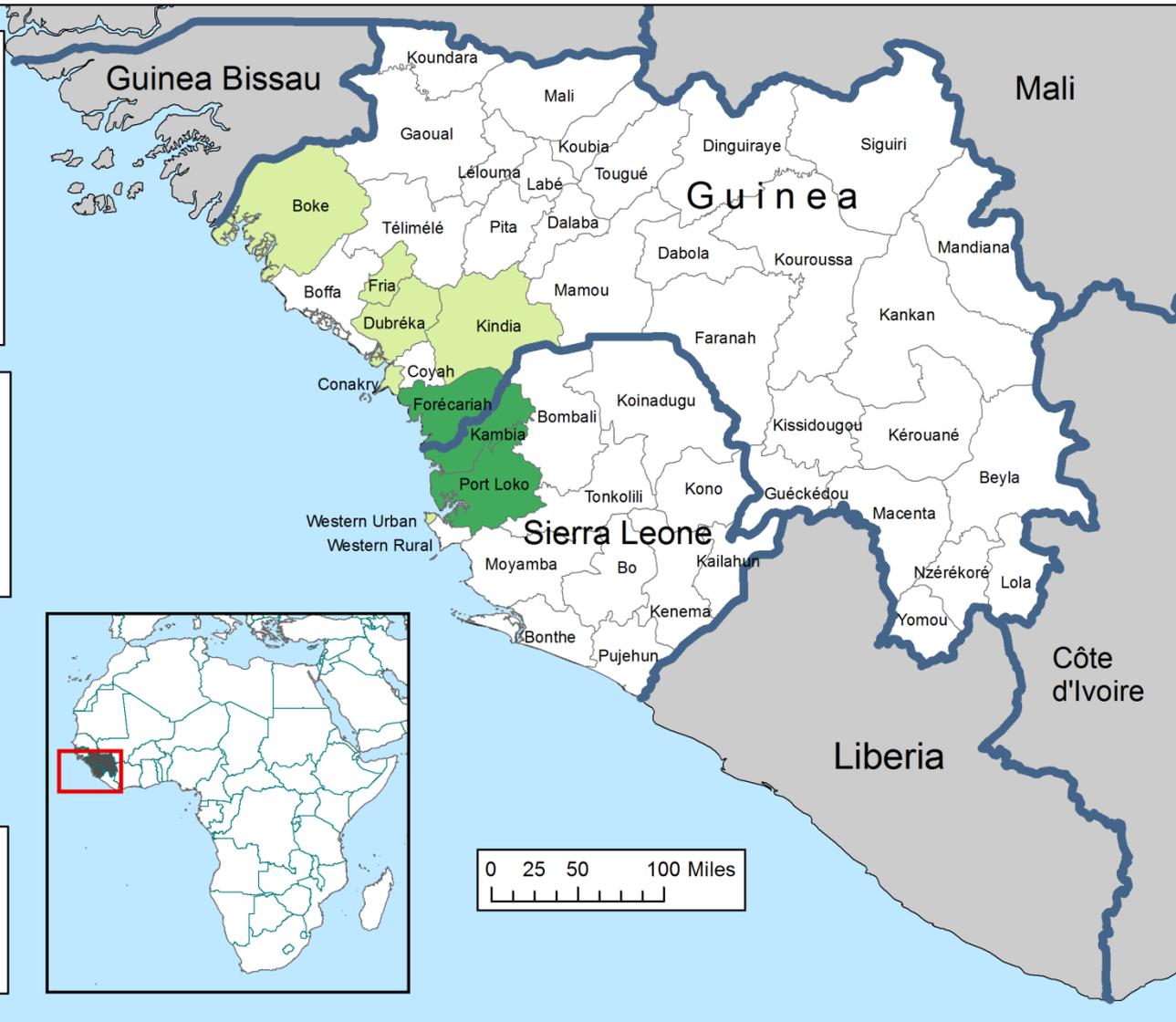


**New confirmed Ebola virus disease cases by district in West Africa, during the most recently reported three-week period**

**New Confirmed Cases**



As of dates:  
 Guinea, 26 MAY - 16 JUN  
 Sierra Leone, 11 MAY - 14 JUN  
 Liberia, EVD free 9 MAY



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

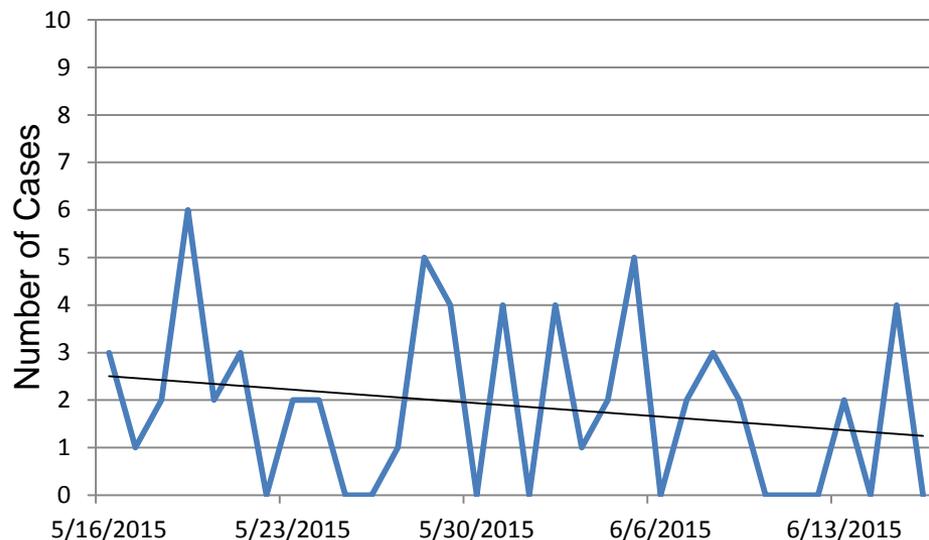


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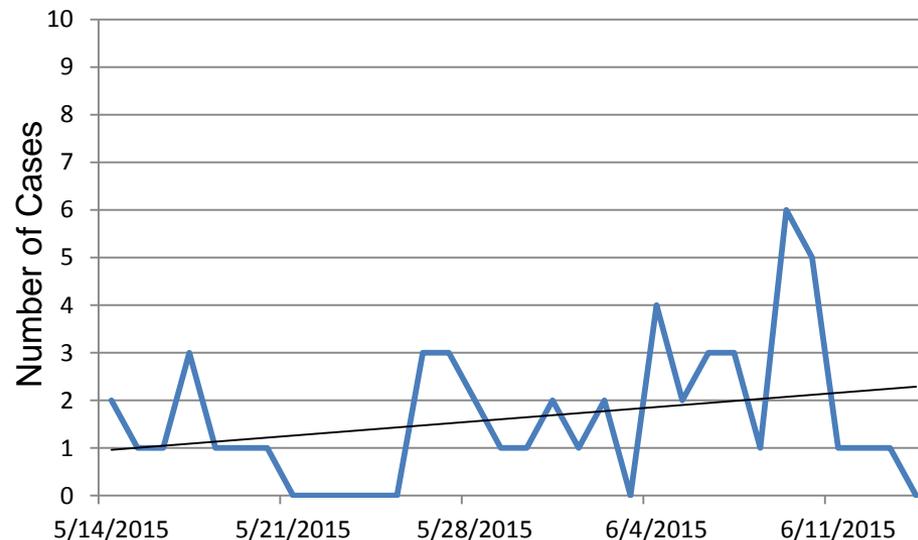


Daily Reported Confirmed EVD Cases with Trend Line for Guinea and Sierra Leone as of 14 JUN 2015 for the Previous Month

### Guinea



### 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 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: New disease control center to develop Ebola response model](#) (allAfrica, 18 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)
- [Monitoring of Ebola virus Makona evolution through establishment of advanced genomic capability in Liberia](#) (Emerging Infectious Diseases, 12 JUN)
- [Ghana halts Ebola vaccine trial due to community protests](#) (Reuters, 10 JUN)
- [A screen of approved drugs and molecular probes identifies therapeutics with anti-Ebola virus activity](#) (Science Translational Medicine, 3 JUN)
- [Scientists release Ebola sequencing data to global research community online](#) (BusinessWire, 3 JUN)
- [Mining Ebola tweets yields valuable outbreak information](#) (Medical News Today, 2 JUN)
- [Ban to convene international Ebola recovery conference in New York](#) (UN News Centre, 2 JUN)
- [Ebola threat to Guinea Bissau rises as border zone heats up](#) (Reuters, 1 JUN)