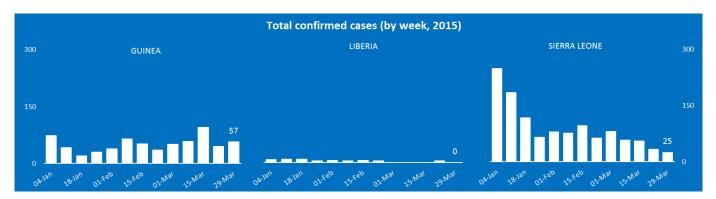
World Health Organization

EBOLA SITUATION REPORT

1 APRIL 2015



SUMMARY

- A total of 82 new confirmed cases of Ebola virus disease (EVD) were reported in the week to 29 March, a slight increase compared with 79 cases the previous week. Case incidence in Guinea increased to 57, compared with 45 the previous week. This offset a fourth consecutive weekly fall in case incidence in Sierra Leone, which reported 25 confirmed cases. Liberia reported no confirmed cases over the same period.
- In addition to an increase in case incidence in Guinea, the geographic area of transmission also increased. A total of 7 Guinean prefectures reported at least one confirmed case in the week to 29 March, compared with 3 the previous week. Two of the 7 prefectures that reported a new confirmed case, Fria and Siguiri, did so for the first time in over 50 days. Siguiri, which borders Mali, is the first prefecture outside the western area of Guinea to report a confirmed case for over 30 days.
- In Sierra Leone, cases were reported from 5 northern and western districts around and including the capital Freetown, which reported 10 new confirmed cases. The neighbouring districts of Bombali (1 case), Kambia (5 cases), Port Loko (6 cases) and Western Rural (3 cases) also reported cases. In total, 12 districts in Guinea and Sierra Leone reported a confirmed case in the week to 29 March, compared with 10 the previous week.
- Response indicators for Guinea present a mixed picture. Of 35 confirmed deaths from EVD in the week to 29 March, 15 (43%) were identified post-mortem in the community, compared with 10 of 37 (27%) the previous week. This increase may be attributable to improved access to communities in Forecariah prefecture. The proportion of confirmed cases that arose among registered contacts increased from 38% in the week to 15 March to 53% in week to 22 March. A total of 20 unsafe burials were reported in the week to 29 March, compared with 26 the previous week.
- A 45-day reinforcement of emergency measures has been declared in the Guinean prefectures of Forecariah, Coyah, Dubreka, Boffa, and Kindia. The capital, Conakry, will also be subject to emergency measures, which include the restriction of movement in areas of transmission, the temporary closure and quarantine of private hospitals and clinics where EVD cases have been detected, and limitation of burial participation to close relatives only. All corpses will be tested for EVD during the 45-day emergency period.
- The last confirmed case in Liberia passed away on 27 March. Investigations are ongoing to establish the origin of infection. A total of 185 contacts associated with the case are being monitored twice a day. Heightened vigilance is being maintained throughout the country. In the week to 29 March, 278 laboratory samples were tested for EVD, with no confirmed cases.
- In the week to 29 March, 67% of confirmed cases in Sierra Leone came from registered contacts, compared with 84% the previous week. There was one report of an unsafe burial over the same period. The proportion of confirmed deaths from EVD that were identified in the community increased slightly, from 7 of 56 (13%) in the previous week to 8 of 52 (15%) in the week to 29 March. Heightened surveillance is being maintained: over 100 suspected cases were reported in the week to 29 March, compared with 57 the previous week. The majority of suspected cases (52) were reported during the final 2 days of the 3-day stay-at-home. Of 1606 samples tested in the week to 29 March, 2% tested positive for EVD.
- There were 8 new health worker infections in the week to 29 March: 7 in Guinea, and 1 in Sierra Leone. This brings the total number of health worker infections reported across the three most-affected countries since the start of the outbreak to 861, with 495 deaths.

25 213

COUNTRIES WITH WIDESPREAD AND INTENSE TRANSMISSION

1 0

Spain

United Kingdom

United States of America

■ There have been a total of 25 178 reported confirmed, probable, and suspected cases¹ of EVD in Guinea, Liberia and Sierra Leone (figure 1, table 1), with over 10 000 reported deaths (outcomes for many cases are unknown). A total of 57 new confirmed cases were reported in Guinea, 0 in Liberia, and 25 in Sierra Leone in the 7 days to 29 March.

Guinea
Liberia
Sierra Leone
Mali
Nigeria
Senegal

Cases
Deaths

9712

11 974

Figure 1: Confirmed, probable, and suspected EVD cases worldwide (data up to 29 March 2015)

Table 1: Confirmed, probable, and suspected EVD cases in Guinea, Liberia, and Sierra Leone

Country	Case definition	Cumulative cases	Cases in past 21 days	Cumulative deaths
Guinea	Confirmed	3068	197	1900
	Probable	414	*	414
	Suspected	10	*	‡
	Total	3492	197	2314
Liberia	Confirmed	3151	1	‡
	Probable	1879	*	‡
	Suspected	4682	*	‡
	Total	9712	1	4332
Sierra Leone	Confirmed	8545	113	3433
	Probable	287	*	208
	Suspected	3142	*	158
	Total	11 974	113	3799
Total	Confirmed	14 764	311	‡
	Probable	2580	*	‡
	Suspected	7834	*	‡
	Total	25 178	311	10 445

10 460

Data are based on official information reported by ministries of health. These numbers are subject to change due to ongoing reclassification, retrospective investigation and availability of laboratory results. *Not reported due to the high proportion of probable and suspected cases that are reclassified. [‡]Data not available.

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¹Case definition recommendations for Ebola or Marburg Virus Diseases: http://www.who.int/csr/resources/publications/ebola/ebola-case-definition-contact-en.pdf?ua=1

- The total number of confirmed and probable cases is similar in males and females (table 2). Compared with children (people aged 14 years and under), people aged 15 to 44 are approximately three times more likely to be affected. People aged 45 and over are three to five times more likely to be affected than are children.
- A total of 861 confirmed health worker infections have been reported in Guinea, Liberia, and Sierra Leone; there have been 495 reported deaths (table 5).

GUINEA

- Key performance indicators for the EVD response in Guinea are shown in table 3.
- A total of 57 confirmed cases were reported in the 7 days to 29 March (figure 3), compared with 45 cases the previous week.
- In addition to an increase in incidence, the geographic area of transmission has also expanded. A total of 7 prefectures reported at least one case, compared with 3 the previous week (figure 2; figure 6). Transmission remains centred in the west of the country, in and around the capital Conakry (19 confirmed cases). The nearby prefectures of Boffa (2 cases), Coyah (8 cases), Dubreka (3 cases), and Forecariah (20 cases) also reported cases (figure 2, figure 6). Two additional prefectures, Fria and Siguiri, reported cases for the first time in over 50 days. Fria, which borders Boffa and Dubreka to the south, reported 3 confirmed cases, one of which was identified only after post-mortem testing of a body found in a community setting. The prefecture had only reported 2 confirmed cases previously, both of which were reported over 80 days ago. A rapid investigation team has been deployed to the area. To the north, on the border with Mali, Siguiri prefecture reported 2 confirmed cases: its first for 50 days.
- Response indicators for Guinea present a mixed picture (table 3). Of 35 confirmed deaths from EVD in the week to 29 March, 15 (43%) were identified post-mortem in the community, compared with 10 of 37 (27%) the previous week. This increase may be attributable to improved access to communities in Forecariah prefecture, where effective community engagement had previously been a challenge. The proportion of confirmed cases that arose among registered contacts increased from 38% in the week to 15 March to 53% in week to 22 March. A total of 20 unsafe burials were reported in the week to 29 March, compared with 26 the previous week.
- Locations of 8 operational Ebola treatment centres (ETCs) are shown in figure 7. Two ETCs have been assessed and have met minimum standards for infection prevention and control (IPC). IPC assessments have also been extended to non-Ebola health facilities. Of 6 such facilities assessed to date, one met minimum IPC standards. In the week to 29 March 7 new health worker infections were reported from Guinea: 4 in Conakry, 1 in Coyah, and 2 in Forecariah. All infections occurred in non-Ebola facilities.
- Locations of the 9 operational laboratories in Guinea are shown in figure 8. Of 471 samples tested in the week to 29 March, 99% were processed within 1 day of arrival at a laboratory: 20% tested positive for EVD.

Table 2: Cumulative number of confirmed and probable cases by sex and age group in Guinea, Liberia, and Sierra Leone

	Cumulative cases					
Country	By sex* (per 100 000 population)		By age group‡ (per 100 000 population)			
	Male	Female	0-14 years	15-44 years	45+ years	
C. i	1653	1795	548	1927	951	
Guinea	(30)	(33)	(12)	(41)	(61)	
Liberia	2957	2889	992	3167	1209	
	(149)	(147)	(58)	(185)	(226)	
Sierra Leone	5433	5768	2330	6231	2427	
	(191)	(199)	(96)	(241)	(328)	

Population figures are based on estimates from the United Nations Department of Economic and Social Affairs. *Excludes cases for which data on sex are not available. ‡Excludes cases for which data on age are not available.

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² United Nations Department of Economic and Social Affairs: http://esa.un.org/unpd/wpp/Excel-Data/population.htm

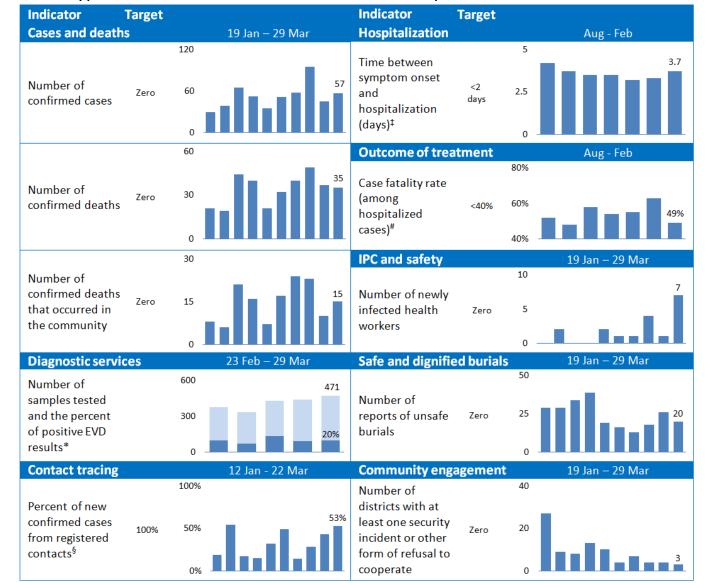


Table 3: Key performance indicators for Guinea for Phase 2 of the Ebola Response

For definitions of key performance indicators see Annex 2. Data are given for 7-day periods *Includes repeat samples. [‡]Data missing for 0–3% of cases. [‡]Outcome data missing for 1–14% of hospitalized confirmed cases. [§]Includes probable cases.

LIBERIA

- Key performance indicators for the EVD response in Liberia are shown in table 4.
- No new confirmed cases were reported from Liberia in the week to 29 March (figure 2; figure 4). The recent confirmed case passed away on 27 March. A total of 185 contacts associated with the case are currently being monitored. Heightened vigilance is being maintained throughout the country. In the week to 22 March, a total of 278 new laboratory samples were tested for EVD. None tested positive for EVD.
- Locations of the 17 operational Ebola treatment centres (ETCs) in Liberia are shown in figure 7. All of the 12 facilities that have been assessed met minimum standards for infection prevention and control. A total of 12 non-Ebola health-care facilities have also been assessed to date (2 in Montserrado county, 10 in Nimba county): 5 (42%) met minimum IPC standards.
- Locations of the 5 operational laboratories in Liberia are shown in figure 8. 89% of samples were processed within 1 day of arrival at a laboratory.

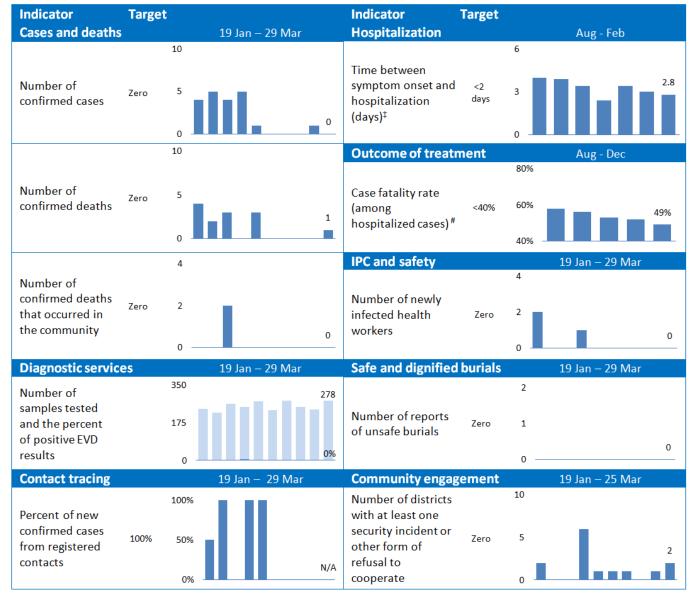


Table 4: Key performance indicators for Liberia for Phase 2 of the Ebola Response

For definitions of key performance indicators see Annex 2. Data are for 7-day periods. † Data missing for 3–23% of cases. Outcome data missing for 2–41% of hospitalized confirmed cases.

Table 5: Ebola virus disease infections in health-care workers in the three countries with intense transmission

Country	Cases	Deaths
Guinea	186	94
Liberia	372	180
Sierra Leone	303	221*
Total	861	495

Data are confirmed cases and deaths only, apart from deaths in Sierra Leone, which include confirmed, probable, and suspected deaths. *Data as of 17 February.

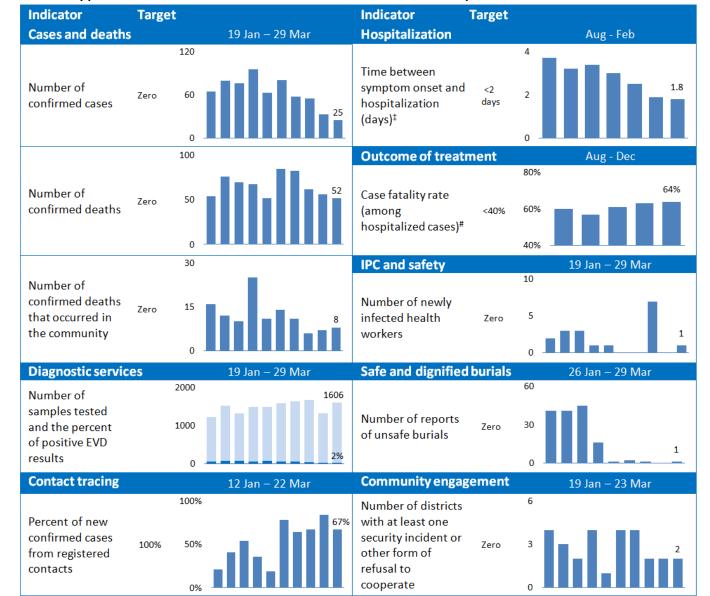


Table 6: Key performance indicators for Sierra Leone for Phase 2 of the Ebola Response

For definitions of key performance indicators see Annex 2. Data are for 7-day periods. [‡]Data missing for 6–11% of cases. [#]Outcome data missing for 36–76% of hospitalized confirmed cases.

SIERRA LEONE

- Key performance indicators for the EVD response in Sierra Leone are shown in table 6.
- A total of 25 confirmed cases were reported in the week to 29 March, compared with 33 the previous week. This is the fourth consecutive weekly decrease and the lowest weekly total since the final week of May 2014.
- Cases were reported from 5 northern and western districts around and including the capital Freetown, which reported 10 new confirmed cases. The neighbouring districts of Bombali (1 case), Kambia (5 cases), Port Loko (6 cases) and Western Rural (3 cases) also reported cases (figure 2; figure 5; figure 6).
- The proportion of confirmed EVD cases that arose among contacts decreased to 67%, from 84% the previous week (table 6). The proportion of confirmed cases identified after post-mortem testing of dead bodies found in the community increased slightly, from 7 of 56 (13%) in the week to 22 March to 8 of 52 (15%). Of those 8, half were reported from the district of Kambia, where community engagement has proved challenging.
- According to the National Ebola Response Centre, 95% of 451 credible reports of potential EVD cases were investigated within 24 hours in the week to 22 March: an increase compared with the previous week. Most (87%) of alerts come from Bombali (39), Port Loko (35), and Western Area (317). The district of Kambia recorded 10 alerts. Potential cases were identified through contact tracing or case finding, or from reports to

- a dedicated national Ebola alert hotline. Heightened vigilance is being maintained throughout the country: of 1606 new samples tested in the week to 29 March, 2% were EVD positive. Over 100 suspected cases were reported during the same period, compared with 57 the previous week. The majority of suspected cases (52) were reported during the final 2 days of the country's 3-day stay-at-home.
- In the context of the 3-day stay-at-home period in Sierra Leone that ended on 29 March, surveillance has been increased at 53 border crossing points between Guinea and Sierra Leone. Guinean authorities indicated that the prefecture of Forecariah, which borders Kambia, will also have a stay-at-home period to reinforce the efforts of Sierra Leonean authorities.
- Locations of the 19 operational Ebola treatment centres (ETCs) in Sierra Leone are shown in figure 7. A total of 12 of 17 assessed ETCs met minimum standards for IPC, as did 9 of 15 assessed community care centres. There was one new health worker infection, reported from a non-Ebola facility in Bombali district, in the week to 29 March.
- Locations of the 13 operational laboratories in Sierra Leone are shown in figure 8. A total of 90% of samples were tested within 1 day of arrival at a laboratory in the week to 29 March.

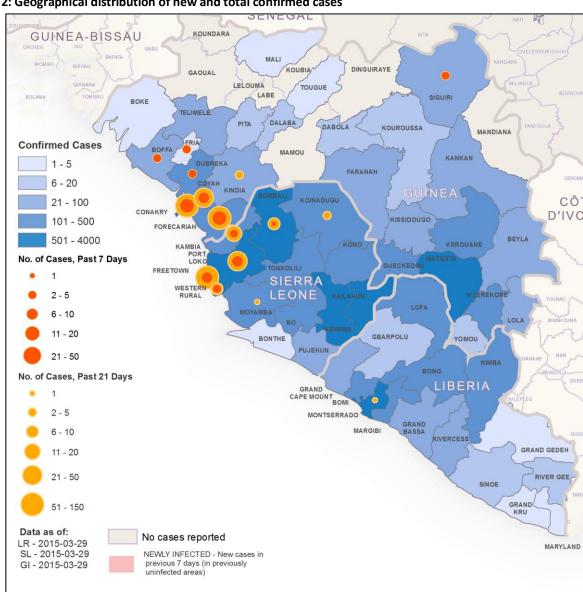


Figure 2: Geographical distribution of new and total confirmed cases

The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

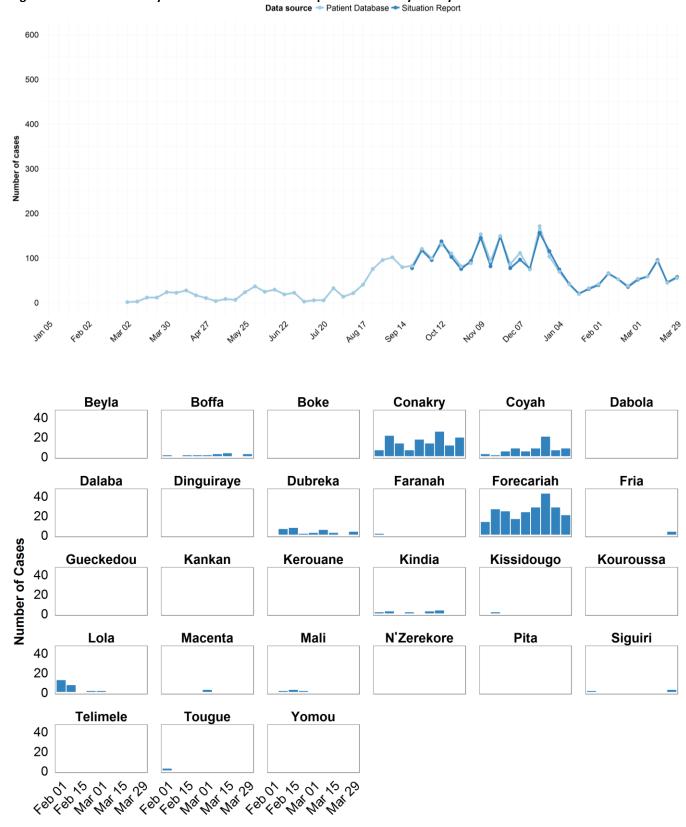


Figure 3: Confirmed weekly Ebola virus disease cases reported nationally and by district from Guinea

Data source - Situation Report 600 500 400 Number of cases 300 200 100 0 **Bomi Bong** Gbarpolu **Grand Bassa** 6 4 2 0 **Grand Gedeh Grand Kru Grand Cape Mount** Lofa 6 4 Number of Cases 2 Margibi Maryland Montserrado Nimba 6 4 2 0 **River Gee Rivercess Sinoe** 6 4 2 0

Figure 4: Confirmed weekly Ebola virus disease cases reported nationally and by district from Liberia

Data are laboratory confirmed cases reported by the Liberian Ministry of Health.

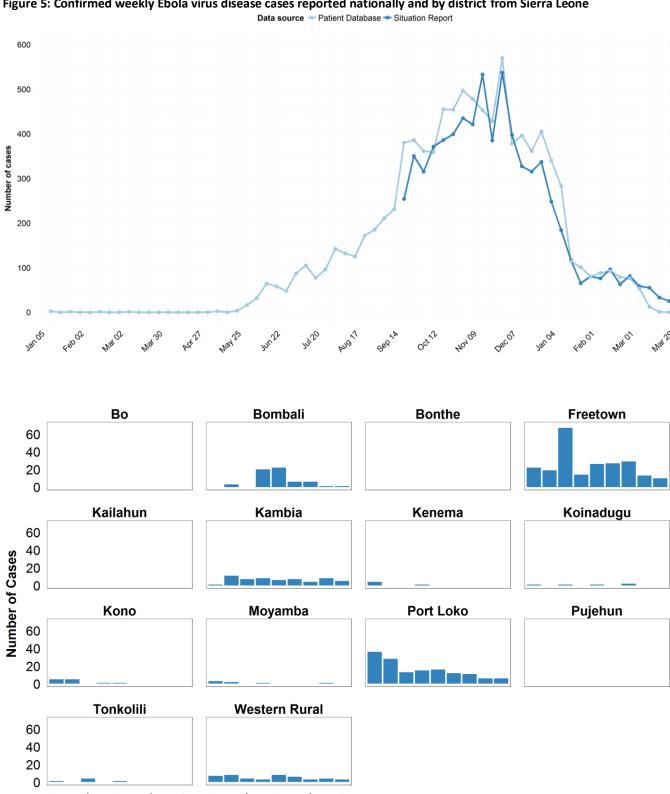


Figure 5: Confirmed weekly Ebola virus disease cases reported nationally and by district from Sierra Leone

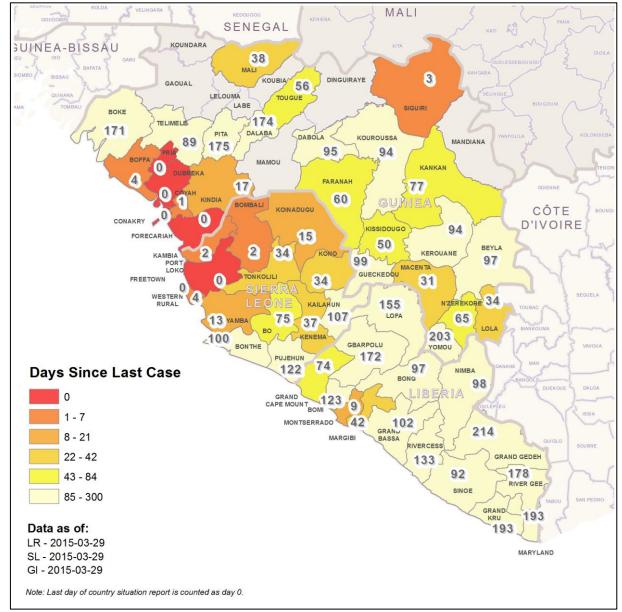


Figure 6: Days since last confirmed case in Guinea, Liberia and Sierra Leone

COUNTRIES WITH AN INITIAL CASE OR CASES, OR WITH LOCALIZED TRANSMISSION

Six countries (Mali, Nigeria, Senegal, Spain, the United Kingdom and the United States of America) have previously reported a case or cases imported from a country with widespread and intense transmission.

PREPAREDNESS OF COUNTRIES TO RAPIDLY DETECT AND RESPOND TO AN EBOLA EXPOSURE

- The introduction of an EVD case into unaffected countries remains a risk for as long as cases are reported in any country. With adequate levels of preparation, however, such introductions of the disease can be contained with a rapid and adequate response.
- WHO's preparedness activities aim to ensure all countries are ready to effectively and safely detect, investigate and report potential EVD cases, and to mount an effective response. WHO provides this support through country visits by preparedness-strengthening teams (PSTs), direct technical assistance to countries, and the provision of technical guidance and tools.



Figure 7: Location of Ebola treatment centres in Guinea, Liberia, and Sierra Leone

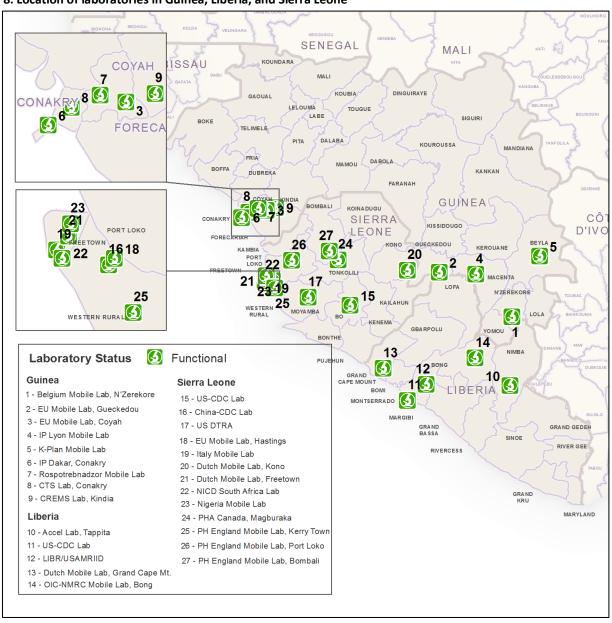
Locations of community care centres and community transit centres are not shown.

Priority countries in Africa

- The initial focus of support by WHO and partners is on highest priority countries Côte d'Ivoire, Guinea Bissau, Mali and Senegal followed by high priority countries Burkina Faso, Benin, Cameroon, Central African Republic, Democratic Republic of the Congo, Ethiopia, Gambia, Ghana, Mauritania, Nigeria, South Sudan, Niger and Togo. The criteria used to prioritize countries include geographical proximity to affected countries, trade and migration patterns, and strength of health systems. Other countries of focus include Nigeria, Democratic Republic of the Congo and South Sudan.
- Since 20 October 2014, preparedness-strengthening teams (PSTs) have provided technical support in 14 countries: Benin, Burkina Faso, Cameroon, Central African Republic, Côte d'Ivoire, Ethiopia, Gambia, Ghana, Guinea Bissau, Mali, Mauritania, Niger, Senegal, and Togo. Technical working group meetings, field visits, high-level exercises and field simulations have helped to identify key areas for improvement. Each country has a tailored 90-day plan to strengthen operational readiness. WHO and partners are deploying staff to the 14 countries to assist with the implementation of 90-day plans.

- Follow-up visits to support priority needs in EVD preparedness have implemented immediate activities in the four Member States (Côte d'Ivoire, Senegal, Mali, and Guinea Bissau) immediately surrounding countries experiencing widespread and intense EVD transmission. In addition to supporting priority areas in each of these countries, the visits were able to strengthen cross-border surveillance and the sharing of outbreak data under the framework of the International Health Regulations.
- A program to roll-out longer term support is currently under development, with staff levels being increased in WHO Country Offices to coordinate preparedness activities. EVD Preparedness Officers are currently deployed to Côte d'Ivoire, Guinea Bissau, The Gambia, and Ethiopia. Deployments to Benin, Mauritania, Senegal, Togo are being finalized.
- Standard viral hemorrhagic fever PPE Modules containing minimum stocks to cover staff protection needs while supporting 10 beds for 10 days for all staff with essential functions have been delivered to Mali, Guinea Bissau, Côte d'Ivoire, Senegal, Mauritania.

Figure 8: Location of laboratories in Guinea, Liberia, and Sierra Leone



Follow-up PST support to priority countries

- Following the initial PST assessment missions to the 14 high-priority countries undertaken in 2014, a second phase of preparedness strengthening has been initiated to achieve the following goals:
 - Provide tailored, targeted technical support to strengthen EVD capacities in human resources;
 operationalise plans; test and improve procedures through field exercises and drills; and support the
 implementation of preparedness plans with financial and logistics support;
 - o Provide leadership and coordinate partners to fully support one national plan;
 - Contribute to the International Health Regulations (2005) strengthening of national core capacities and the resilience of health systems.
- A mission to Togo completed its work on 27 March. In addition to activities carried out to strengthen logistic and emergency coordination in outbreak response, the mission focused on improving community-based surveillance and conducted training with regional surveillance and medical officers in this regard.
- A cross border meeting between Guinea and Côte d'Ivoire took place in Man, Côte d'Ivoire, on 28 March 2015 to establish and reinforce collaboration between border districts in the two countries.
- Follow-up technical assistance to Benin is ongoing for a period of ten days to support the development of standard operating procedures for surveillance, the management of EVD alerts, investigation and rapid response. Assistance is also planned for the establishment of a national infection prevention and control program, and improved logistics capacity.
- A follow up visit to Burkina Faso is ongoing (30 March 10 April 2015), with support being provided for a progress review, updating of the national operational plan, and the design and operation of the national Ebola Treatment Center (ETC) in Ouagadougou.
- Missions are planned for Democratic Republic of Congo and South Sudan in mid-April.

Training

 A clinical management training session took place from 23 to 27 March in Kampala, Uganda, with participants from Ethiopia, Ghana and Cameroon. A similar training for French-speaking countries will be held from 13 to 17 April 2015 in Bamako, Mali.

Surveillance and preparedness indicators

- Indicators based on surveillance data, case-management capacity, laboratory testing and equipment stocks continue to be collected on a weekly basis from the four countries neighbouring affected countries: Côte d'Ivoire, Guinea-Bissau, Mali and Senegal .
- An interactive preparedness dashboard based on the WHO EVD checklist is now available online³.

ANNEX 1: COORDINATION OF THE EBOLA RESPONSE

WHO continues to work with many partners in response to the EVD outbreak, including the African Union, the Economic Community of West African States, the Mano River Union, national governments, non-governmental organizations and UN agencies. Agencies responsible for coordinating 4 key lines of action in the response are given below.

Lines of action	Lead agency
Case management	wно
Case finding, laboratory services, and contact tracing	wно
Safe and dignified burials	International Federation of Red Cross and Red Crescent Societies (IFRC)
Community engagement and social mobilization	UNICEF

3 See: http://apps.who.int/ebola/preparedness/map

ANNEX 2: DEFINITION OF KEY PERFORMANCE INDICATORS FOR PHASE 2 OF THE EBOLA RESPONSE.

Indicator	Numerator	Numerator Source	Denominator	Denominator			
Cases and deaths				Source			
Cases and deaths		Guinea: Daily WHO situation reports					
Number of confirmed cases	# of confirmed cases	Liberia/Sierra Leone: Daily Ministry of Health Ebola situation reports	N/A	N/A			
Number of confirmed deaths	# of confirmed deaths	Guinea: Daily WHO situation reports Liberia/Sierra Leone: Daily Ministry of Health Ebola situation reports	N/A	N/A			
Number of confirmed deaths that occurred in the community	# of deaths that occurred in the community with positive EVD swab results	Guinea: Weekly WHO situation reports Liberia/Sierra Leone: Daily Ministry of Health	N/A	N/A			
Diagnostic Services							
Number of samples tested and percentage with positive EVD results	# of new samples tested # of new samples tested with a positive EVD result	Guinea: Laboratory database Liberia/Sierra Leone: Daily Ministry of Health Ebola situation reports	N/A # of new samples tested	Guinea: Laboratory database Liberia/Sierra Leone: Daily Ministry of Health Ebola situation reports			
Contact tracing							
Percent of new confirmed cases from registered contacts	# of new confirmed cases registered as a contact	Guinea: Weekly WHO situation reports Liberia: Daily Ministry of Health Ebola situation reports Sierra Leone: Weekly Ministry of Health Surveillance Report	# of new confirmed cases	Guinea: Daily WHO situation reports Liberia/Sierra Leone: Daily Ministry of Health Ebola situation Reports			
Hospitalization							
Time between symptom onset and hospitalization (days)	Time between symptom onset and hospitalization of confirmed, probable or suspected cases (geometric mean number of days)	Clinical investigation records	N/A	N/A			
Outcome of treatment							
Case fatality rate (among hospitalized cases)	# of deaths among hospitalized cases (confirmed)	Clinical investigation records	# of hospitalized cases (confirmed) with a definitive survival outcome recorded	Clinical investigation records			
	nd Control (IPC) and Safety						
Number of newly infected health workers	# of newly infected health workers	Guinea: Daily WHO situation reports Liberia/Sierra Leone: Daily Ministry of Health Ebola situation Reports	N/A	N/A			
Safe and dignified buris	Safe and dignified burials						
Number of unsafe burials reported	# of reports/alerts of burials that were not known to be safe	Guinea: Daily WHO situation reports Liberia/Sierra Leone: Ministry of Health situation reports	N/A	N/A			
Social mobilization Number of districts							
with at least one security incident or other form of refusal to cooperate	# of districts with at least one security incident or other form of refusal to cooperate in the past week	Guinea: Daily WHO situation reports Liberia/Sierra Leone: UNICEF	N/A	N/A			