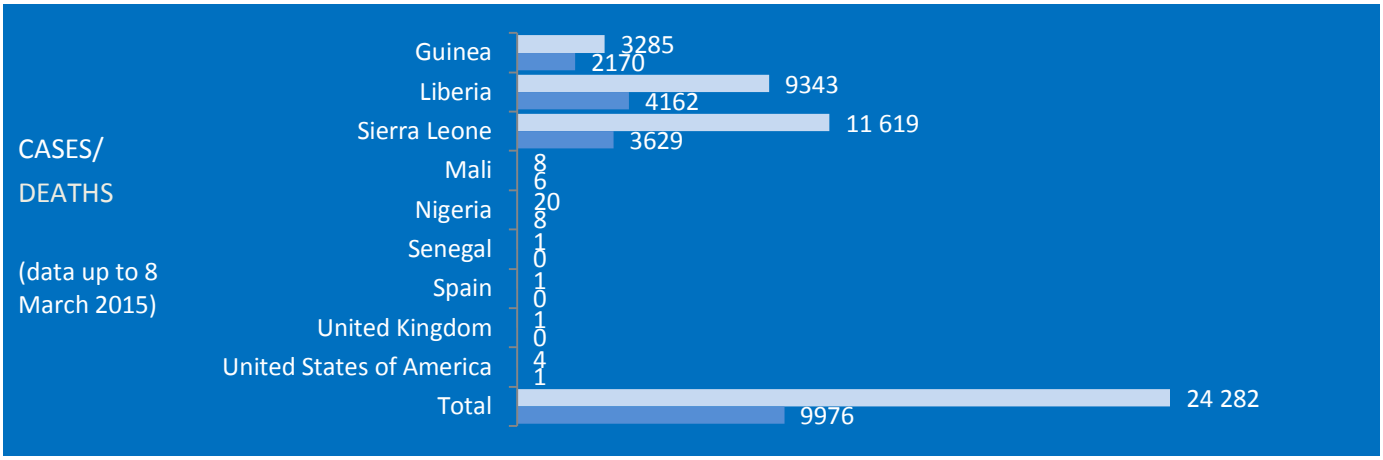
World Health Organization

EBOLA SITUATION REPORT

11 MARCH 2015



SUMMARY

- A total of 116 new confirmed cases of Ebola virus disease (EVD) were reported in the week to 8 March, compared with 132 the previous week. Liberia reported no new confirmed cases for the second consecutive week. New cases in Guinea and Sierra Leone occurred in a geographically contiguous arc around the coastal capital cities of Conakry and Freetown, with a total of 11 districts reporting cases. Although there has been no significant decline in overall case incidence since late January, the recent contraction in the geographical distribution of cases is a positive development, enabling response efforts to be focused on a smaller area.
- Guinea reported 58 new confirmed cases in the week to 8 March, compared with 51 cases the previous week. Cases were clustered in an area around and including the capital Conakry (13 cases), with the nearby prefectures of Boffa (2 cases), Coyah (8 cases), Dubreka (5 cases), Forecariah (28 cases), and Kindia (2 cases) the only other prefectures to report cases.
- Sierra Leone reported 58 new confirmed cases in the week to 8 March; the first time since June 2014 that weekly incidence has not exceeded that of Guinea. Cases were reported from 5 north and western districts clustered around the capital Freetown, which reported 27 new confirmed cases. The neighbouring districts of Bombali (6 cases), Kambia (7 cases), Port Loko (12 cases) and Western Rural (6 cases) also reported cases.
- In the 4 days to 5 March there were 90 reported suspected cases in Liberia, none of whom tested positive for EVD, indicating that vigilance is being maintained. A total of 102 contacts were being followed up.
- The number of confirmed EVD deaths occurring in the community has risen for the past 3 weeks in Guinea, suggesting that there are still significant challenges in terms of contact tracing and community engagement. Of a total of 40 EVD-positive deaths reported in the week to 8 March, 24 occurred in the community. By contrast, a far smaller proportion of EVD-positive deaths occurred in the community in Sierra Leone: 11 of 83. A total of 13 unsafe burials were reported from Guinea and 2 from Sierra Leone over the same period.
- In the week to 1 March, 7 of 51 (14%) confirmed cases of EVD reported from Guinea arose among known contacts of previous cases, indicating that there are a large number of untraced contacts associated with known chains of transmission, and that unknown chains of transmission persist. In Sierra Leone, by contrast, 52 of 81 (64%) of confirmed EVD cases arose among known contacts over the same period. The average daily number of contacts traced in the week to 8 March was 1433 in Guinea, compared with 7934 in Sierra Leone.
- The relatively low proportion of cases arising among known contacts, the relatively high proportion of EVD-positive deaths that occur in the community, and the continued occurrence of unsafe burials in Guinea are all indicative of continued difficulties engaging effectively with affected communities. A total of 7 Guinean prefectures reported at least one security incident in the week to 8 March.
- During the week to 1 March, five cross-border meetings took place, including a coordination meeting in Kambia and Forecariah to facilitate communication, share best practices, and align strategies.
- In the week to 8 March, 1 new health worker infection was reported in Guinea, bringing the total number of health worker infections reported across the three most-affected countries since the start of the outbreak to 840, with 491 deaths.

COUNTRIES WITH WIDESPREAD AND INTENSE TRANSMISSION

- There have been over 24 000 reported confirmed, probable, and suspected cases[1] of EVD in Guinea, Liberia and Sierra Leone (table 1), with almost 10 000 reported deaths (outcomes for many cases are unknown). A total of 58 new confirmed cases were reported in Guinea, 0 in Liberia, and 58 in Sierra Leone in the 7 days to 8 March (4 days to 5 March for Liberia).
- 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 nearly four times more likely to be affected than children.
- A total of 840 confirmed health worker infections have been reported in the 3 intense-transmission countries; there have been 491 reported deaths (table 4).

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

Country	Case definition	Cumulative cases	Cases in past 21 days	Cumulative deaths
Guinea	Confirmed	2871	144	1778
	Probable	392	*	392
	Suspected	22	*	‡
	Total	**3285**	**144**	**2170**
Liberia**	Confirmed	3150	4	‡
	Probable	1879	*	‡
	Suspected	4314	*	‡
	Total	**9343**	**4**	**4162**
Sierra Leone	Confirmed	8428	202	3263
	Probable	287	*	208
	Suspected	2904	*	158
	Total	**11 619**	**202**	**3629**
Total	Confirmed	14 449	350	‡
	Probable	2558	*	‡
	Suspected	7240	*	‡
	Total	**24 247**	**350**	**9961**

*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. **Data missing for 6, 7, 8 March.*

GUINEA

- Key performance indicators for the EVD response in Guinea are shown in table 3.
- A total of 58 confirmed cases were reported in the 7 days to 8 March (figure 1), compared with 51 cases the week before.
- Cases were clustered in an area around and including the capital Conakry (13 cases), with the nearby prefectures of Boffa (2 cases), Coyah (8 cases), Dubreka (5 cases), Forecariah (28 cases), and Kindia (2 cases) the only other prefectures to report cases (figure 1, figure 4). Lola and Macenta in the east of the country and the northern prefecture of Mali have reported confirmed cases in the past 21 days.
- Community engagement continues to be a significant challenge in Guinea. In the week to 8 March, 7 prefectures reported at least one security incident, including every one of the prefectures that reported a confirmed case over the same period. The relatively low proportion of confirmed EVD cases that arose among

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

known contacts (7 of 51), the relatively high proportion of EVD-positive deaths that occurred in the community (24 of 40), and the continued occurrence of unsafe burials in Guinea (13) over the most recent reporting period are all attributable in part to continued difficulties with community engagement.

- Locations of 8 operational Ebola treatment centres (ETCs) are shown in figure 6. Two ETCs have been assessed and have met minimum standards for infection prevention and control (IPC). At present, 5 of 8 ETCs are occupied by patients with EVD. One new health worker infection was reported from Coyah in the week to 8 March.
- The case fatality rate (CFR) among people hospitalized with confirmed EVD for whom a definitive outcome was reported was 63% in January. On average, it took 3.3 days between the onset of EVD symptoms and hospitalization of a confirmed, probable or suspected case during February.
- Locations of the 7 operational laboratories in Guinea are shown in figure 7.

LIBERIA

- Key performance indicators for the EVD response in Liberia are shown in table 3.
- No new confirmed cases were reported in the 4 days to 5 March: the second consecutive week with no new confirmed cases.
- Montserrado and Margibi are the only counties to have reported a confirmed case within the past 21 days (figure 5). A total of 102 contacts were being monitored. Surveillance and alert systems detected 90 suspected cases in the 4 days to 5 March, none of whom have tested positive for EVD.
- Locations of the 18 operational Ebola treatment centres (ETCs) in Liberia are shown in figure 6. All of the 12 that have been assessed met minimum infection prevention and control standards as of February.
- Case fatality rates for people hospitalized with confirmed EVD for whom a definitive outcome was reported were 53%, 52% and 50% for the months of October, November and December, respectively. On average, it took 2.2 days between the onset of EVD symptoms and hospitalization of a confirmed, probable or suspected case during February.
- In a recent assessment of infection prevention and control measures in 113 non-Ebola health facilities in Monstserrado county, 45 (40%) were judged to have a functional triage system in place capable of the rapid assessment of patients.
- Locations of the 5 operational laboratories in Liberia are shown in figure 7.

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

Country	Cumulative cases				
	By sex* (per 100 000 population)		By age group‡ (per 100 000 population)		
	Male	Female	0-14 years	15-44 years	45+ years
Guinea	1535 (28)	1647 (30)	496 (11)	1782 (38)	885 (57)
Liberia	2897 (146)	2845 (145)	970 (57)	3113 (182)	1181 (221)
Sierra Leone	5325 (187)	5664 (195)	2272 (94)	6112 (236)	2397 (324)

Population figures are based on estimates from the United Nations Department of Economic and Social Affairs.[2] **Excludes cases for which data on sex are not available. ‡Excludes cases for which data on age are not available.*

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

Figure 1: Confirmed weekly Ebola virus disease cases reported nationally and by district from Guinea

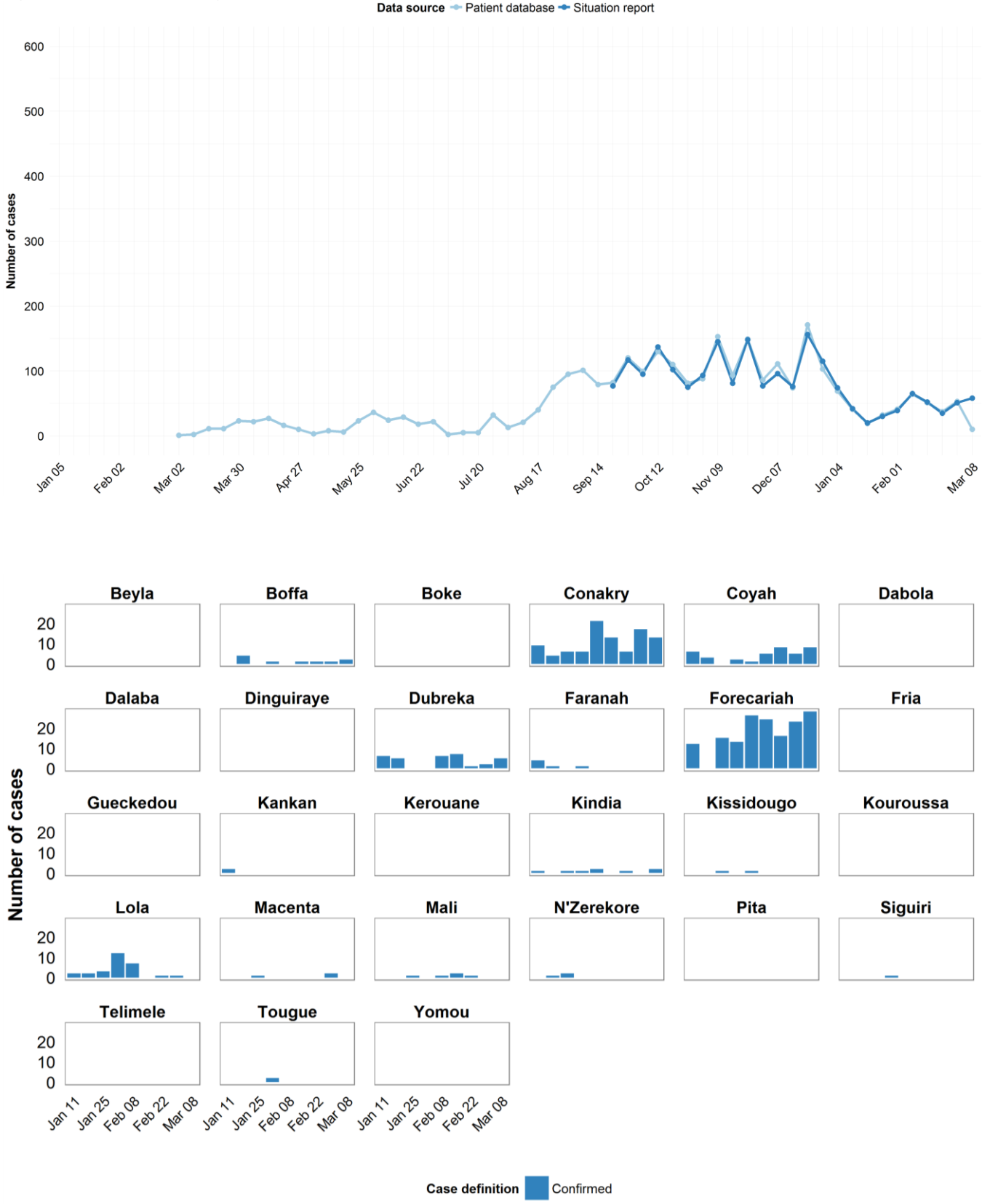
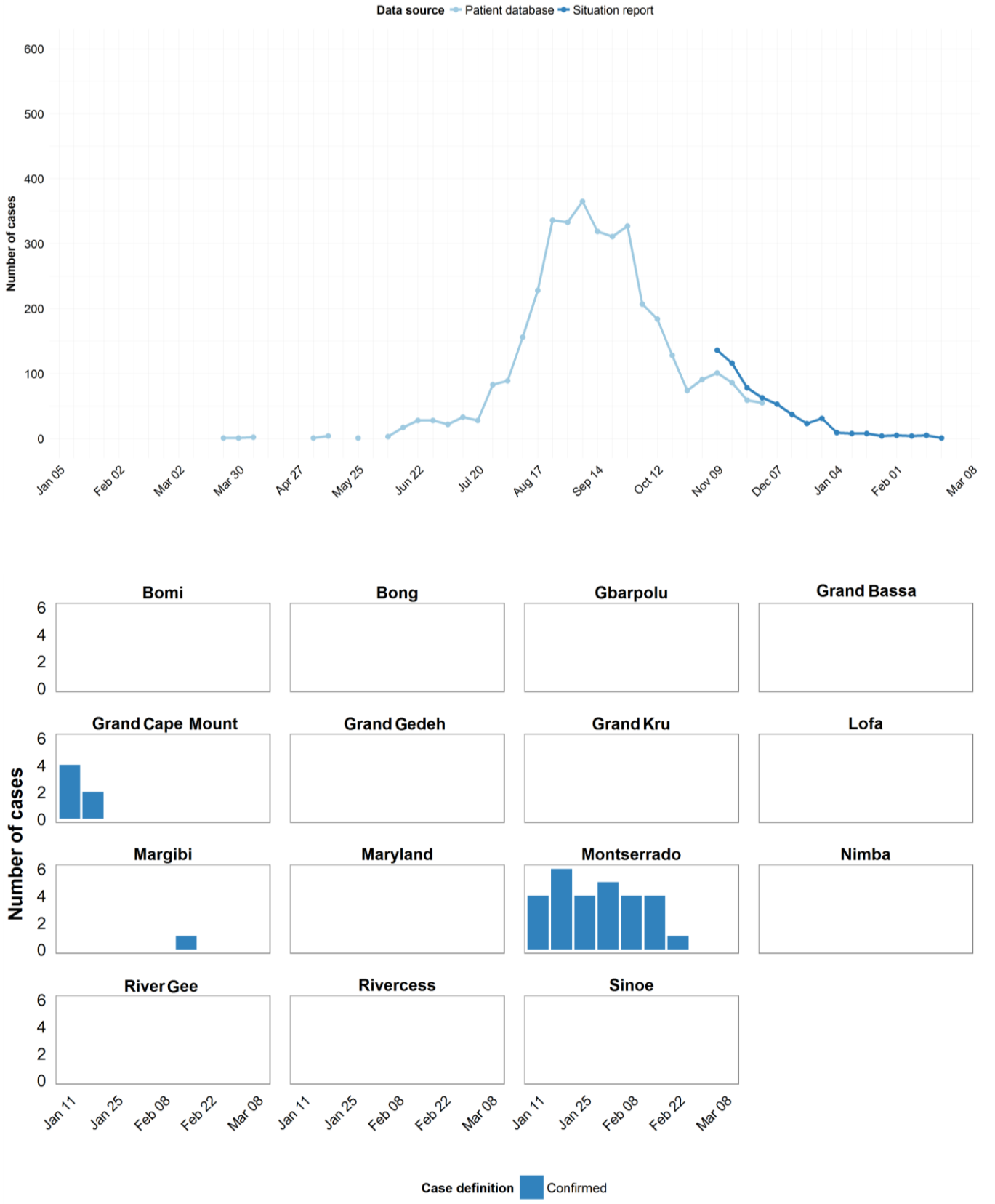


Figure 2: Confirmed weekly Ebola virus disease cases reported nationally and by district from Liberia



Systematic data on laboratory confirmed cases have been available since 3 November nationally, and since 16 November for each district. Data missing for 6, 7, and 8 March.

Table 3: Key performance indicators across the 4 lines of action for Phase 2 of the Ebola Response

CASE FINDING

Indicator	Target	Guinea			Liberia			Sierra Leone		
Cases and deaths		22 Feb	1 Mar	8 Mar	22 Feb	1 Mar	5 Mar	22 Feb	1 Mar	8 Mar
Number of confirmed cases	Zero	35	51	58	1	0	0	63	81	58
Number of confirmed deaths	Zero	21	32	40	3	0	0	52	85	83
Number of confirmed deaths that occurred in the community	Zero	7	17	24	0	0	0	11	14	11
Contact tracing		15 Feb	22 Feb	1 Mar	22 Feb	1 Mar	5 Mar	15 Feb	22 Feb	1 Mar
Percent of new confirmed cases from registered contacts[#]	100%	(17/53) 32%	(17/35) 49%	(7/51) 14%	(5/5) 100%	(0/0)	(0/0)	(18/96) 19%	(49/63) 78%	(52/81) 64%

For definitions of key performance indicators see Annex 2. Data are given for complete months unless otherwise specified. [#]Data from Guinea includes new confirmed and probable cases from registered contacts.

SAFE AND DIGNIFIED BURIALS

Indicator	Target	Guinea			Liberia			Sierra Leone		
		22 Feb	1 Mar	8 Mar	22 Feb	1 Mar	8 Mar	22 Feb	1 Mar	8 Mar
Number of unsafe burials reported	Zero	19	16	13	0	0	0	16	1	2

For definitions of key performance indicators see Annex 2.

CASE MANAGEMENT

Indicator	Target	Guinea			Liberia			Sierra Leone		
Isolation		Dec	Jan	Feb	Dec	Jan	Feb	Dec	Jan	Dec
Time between symptom onset and hospitalization‡	<2 days	3.2	3.2	3.3	3.2	3.0	2.2	2.5	1.9	1.8
Outcome of treatment		Nov*	Dec*	Jan*	Oct*	Nov*	Dec*	Oct*	Nov*	Dec*
Case fatality rate (among hospitalized cases)##	<40%	55%	57%	63%	53%	52%	50%	60%	63%	67%
IPC and Safety		Jan			Feb			Jan		
Percent of IPC-assessed ETCs that met minimum IPC standards§	100%	(2/2) 100%			(12/12) 100%			(14/18) 78%		
		22 Feb	1 Mar	8 Mar	22 Feb	1 Mar	8 Mar	22 Feb	1 Mar	8 Mar
Number of newly infected health workers**	Zero	2	1	1	0	0	0	1	0	0

*For definitions of key performance indicators see Annex 2. ‡Hospitalization for confirmed, probable and suspected cases is not recorded for 0-2% of cases in Guinea, 4-23% in Liberia and 6-9% in Sierra Leone. ##No final outcome is recorded in 3-14% of confirmed and probable cases in Guinea, 2-41% in Liberia, and 68–76% in Sierra Leone. *Different reporting period. §IPC assessment results are available periodically. This data reflects IPC assessments of ETCs and not Community Care Centres (CCCs) or other Ebola facilities. **Does not include foreign medical teams.*

COMMUNITY ENGAGEMENT

Indicator	Target	Guinea			Liberia			Sierra Leone		
		15 Feb	22 Feb	8 Mar	18 Feb*	25 Feb*	4 Mar*	18 Feb*	25 Feb*	2 Mar*
Number of districts with at least one security incident or other form of refusal to cooperate	Zero	10	4	7	6	1	1	4	4	4

*For definitions of key performance indicators see Annex 2. *Different reporting period.*

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

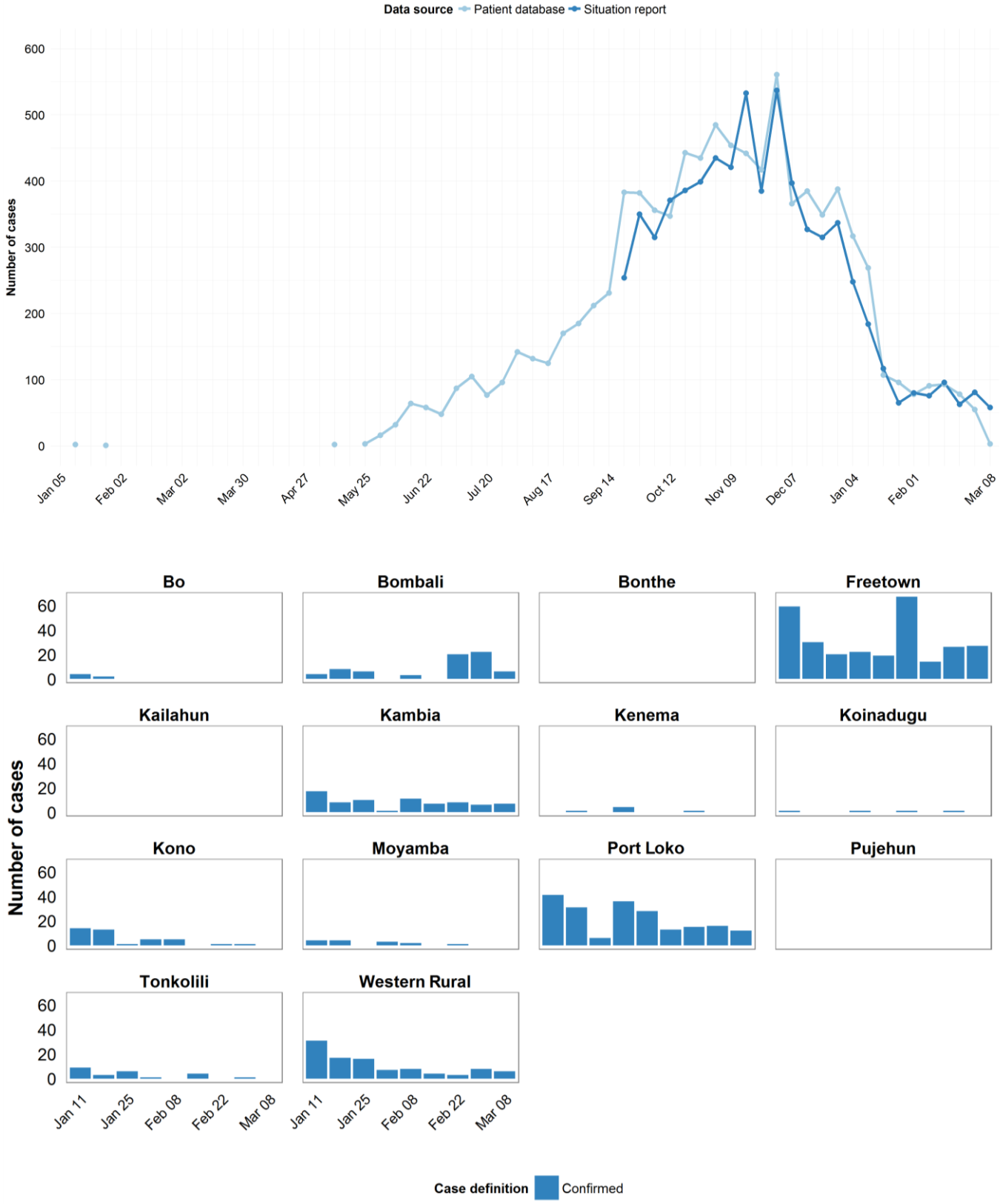
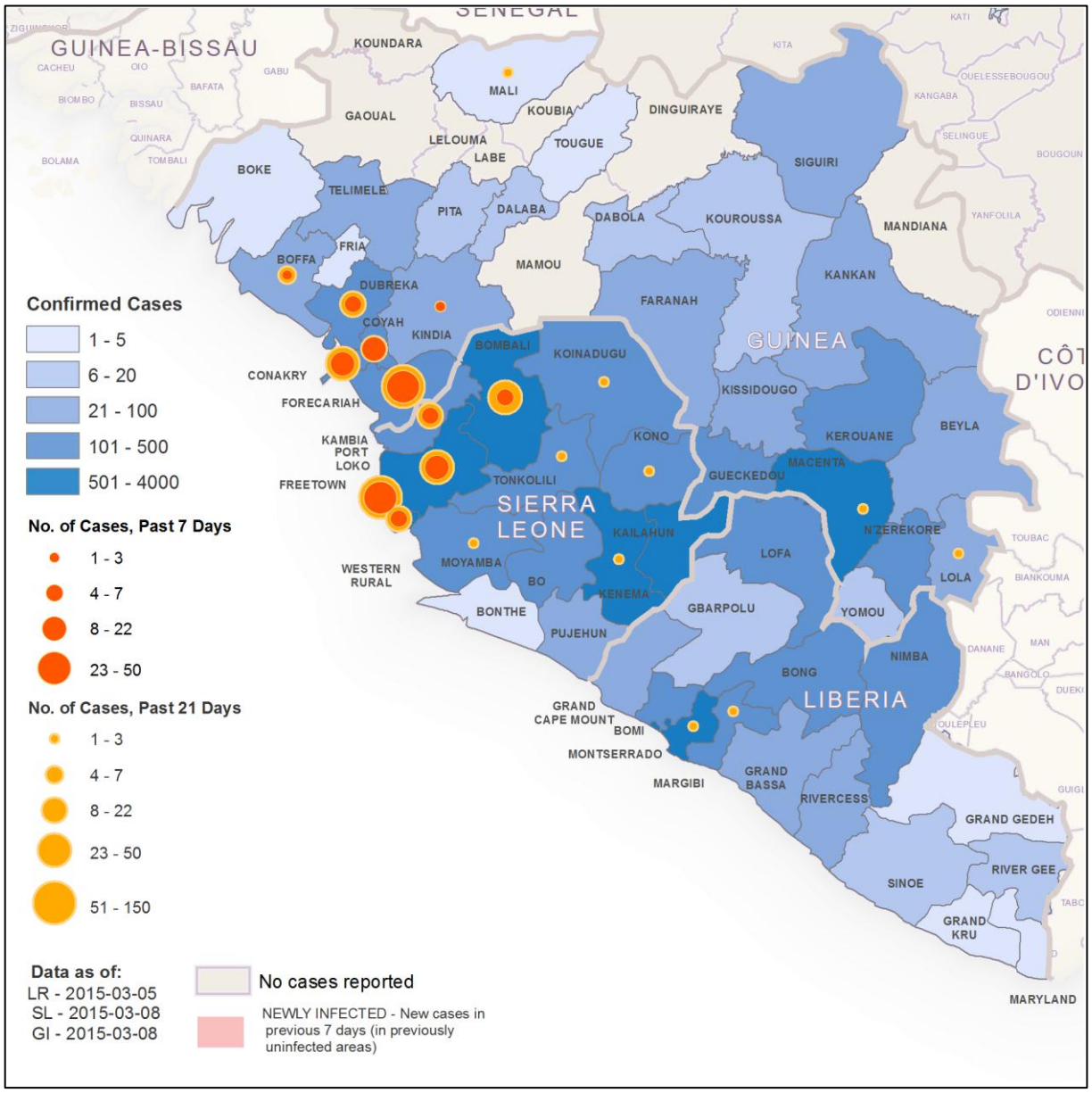


Figure 4: Geographical distribution of new and total confirmed cases



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.

SIERRA LEONE

- Key performance indicators for the EVD response in Sierra Leone are shown in table 3.
- A total of 58 confirmed cases were reported in the week to 8 March, compared with 81 the previous week. This is the first time since June 2014 that weekly incidence in Sierra Leone has not exceeded that of Guinea.
- Cases were reported from 5 northern and western districts clustered around the capital Freetown, which reported 27 new confirmed cases. The neighbouring districts of Bombali (6 cases), Kambia (7 cases), Port Loko (12 cases) and Western Rural (6 cases) also reported cases.
- With the exception of 4 districts in the south of the country, all districts in Sierra Leone have reported a confirmed case within the past 21 days.
- Almost two-thirds (52 of 81) of confirmed EVD cases arose among known contacts in the week to 8 March; the number of confirmed cases identified after post-mortem testing of dead bodies found in the community

fell to 11 in the week to 8 March, compared with 14 the previous week. Four districts reported at least one incident of community resistance in the week to 8 March.

- Locations of the 20 operational Ebola treatment centres (ETCs) in Sierra Leone are shown in figure 6. The Magbenteh ETC in the district of Bombali closed during the week to 8 March.
- Locations of the 13 operational laboratories in Sierra Leone are shown in figure 7.

Table 4: Ebola virus disease infections in health-care workers in the three countries with intense transmission

Country	Cases	Deaths
Guinea	173	90
Liberia	372	180
Sierra Leone	295	221
Total	**840**	**491**

Data are confirmed cases and deaths only, apart from deaths in Sierra Leone, which include confirmed, probable, and suspected deaths.

Figure 5: Days since last confirmed case in Guinea, Liberia and Sierra Leone

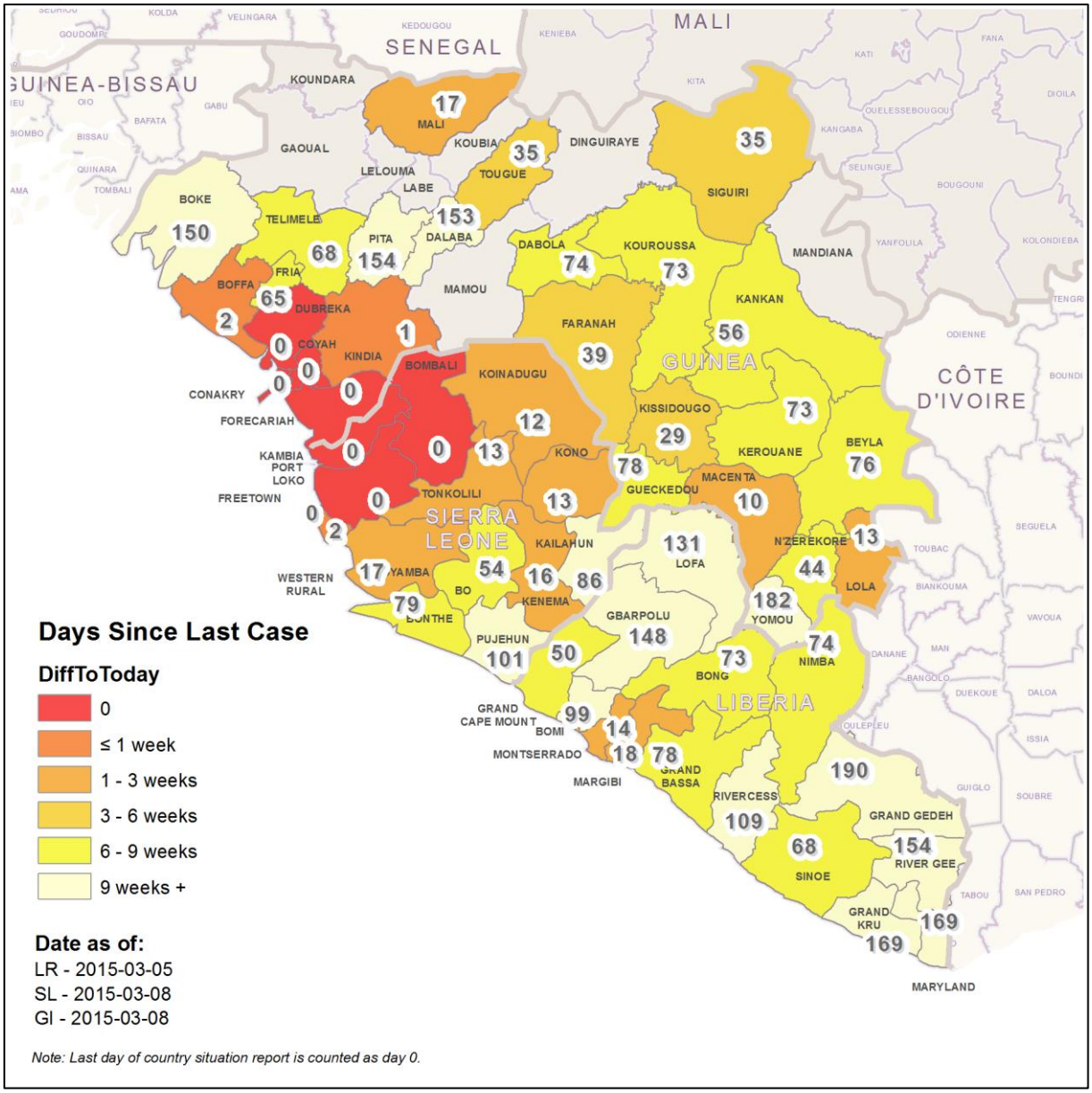
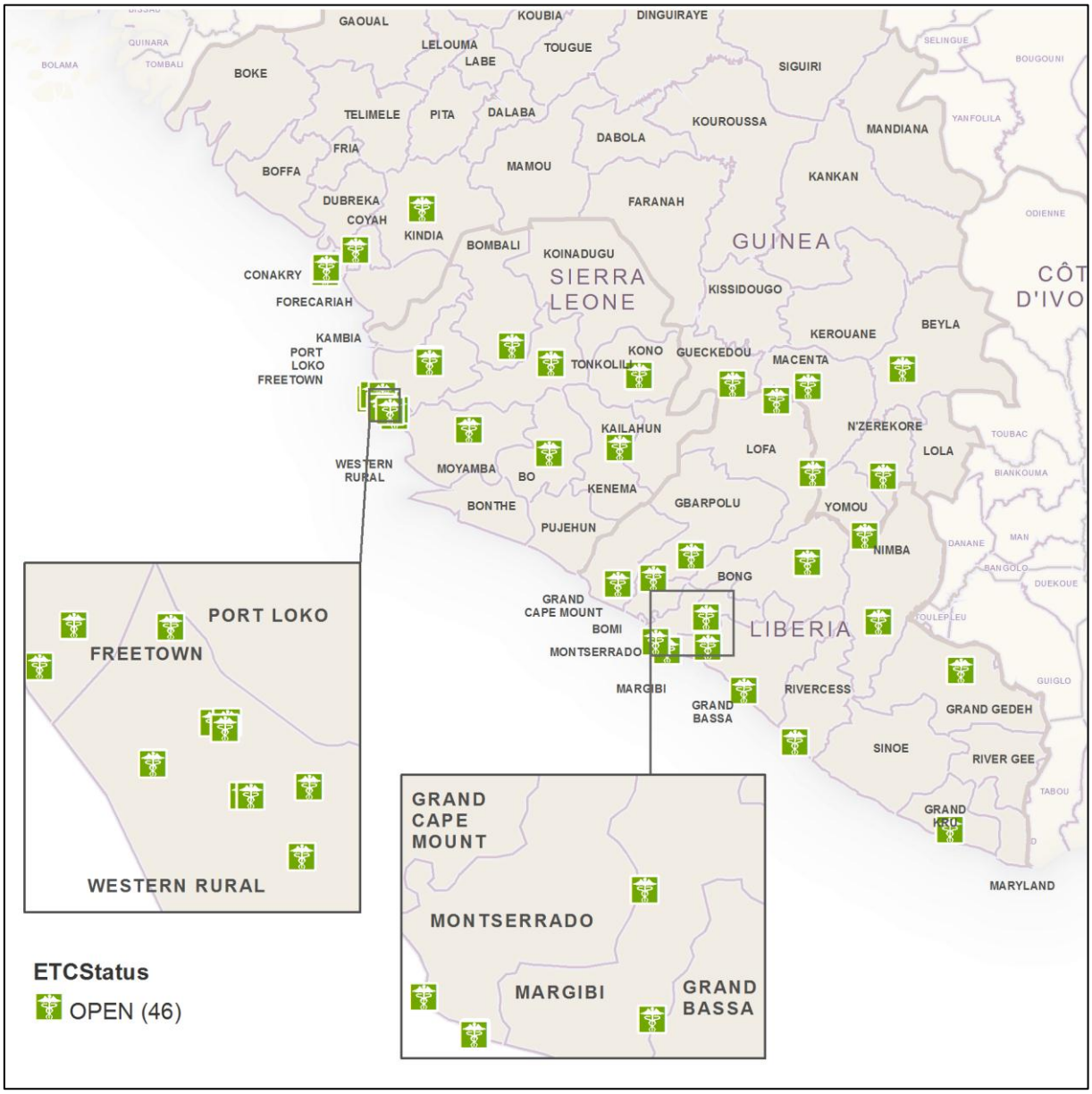


Figure 6: Location of Ebola treatment centres in Guinea, Liberia, and Sierra Leone



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

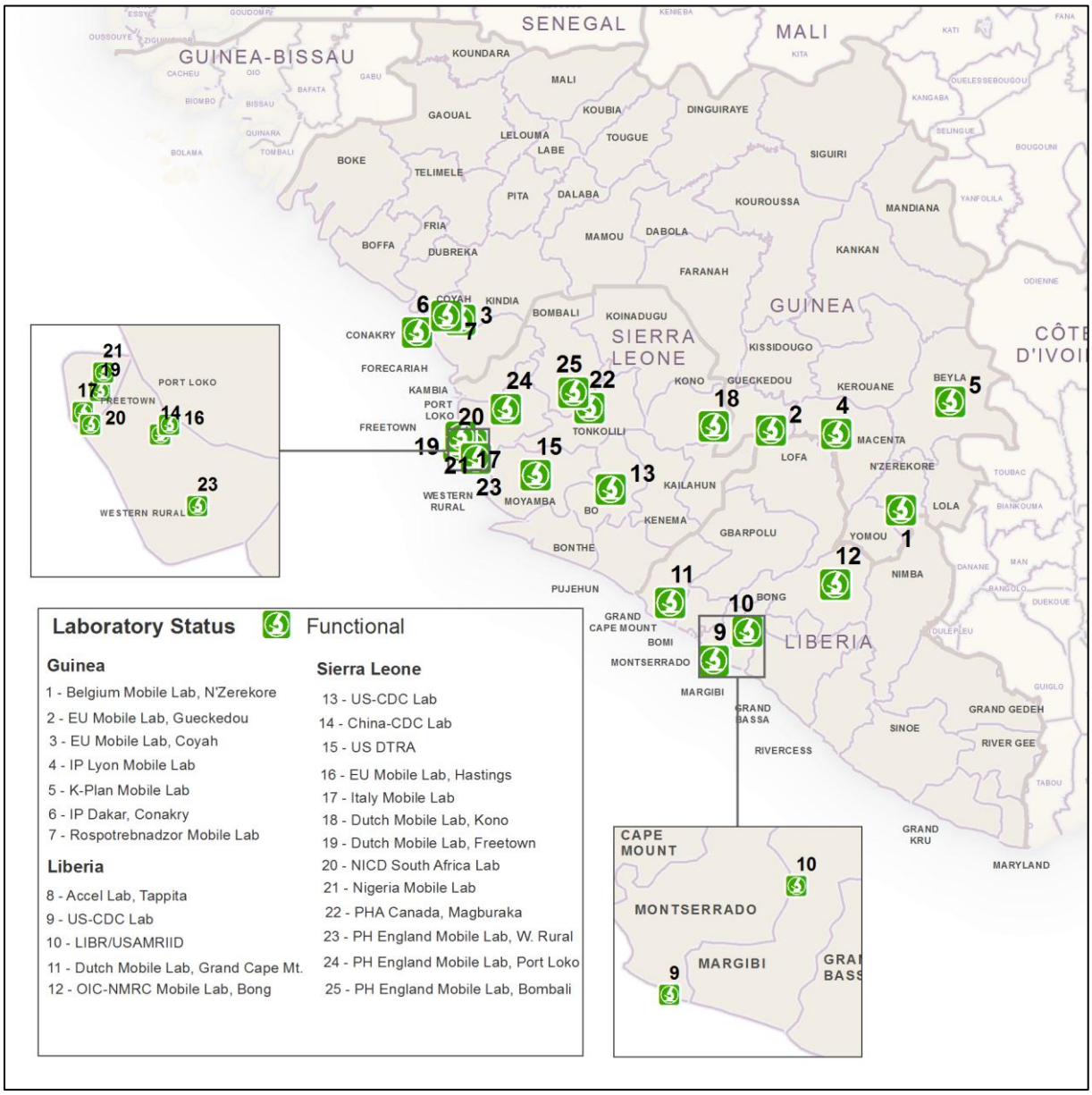
COUNTRIES WITH AN INITIAL CASE OR CASES, OR WITH LOCALIZED TRANSMISSION

Six countries (Mali, Nigeria, Senegal, Spain, the United Kingdom and the United States of America) have 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 laboratories in Guinea, Liberia, and Sierra Leone



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.
- 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 completed their initial 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 upcoming activities.

- A technical assistance mission to Mauritania was completed last week (25 February to 4 March 2015). Support was provided in the areas of community engagement and social mobilization, case management, logistics, and points of entry. Particular emphasis was given to awareness-raising sessions for frontline clinicians at national, regional, and private hospitals; training on the appropriate use of personal protective equipment (PPE); and briefings to the health and security staff present at border crossings. The team also supported the development of standard operating procedures. An additional emergency stock of PPE was also delivered to Mauritania during the mission.
- Preparedness indicators (based on surveillance data, case management capacity, laboratory testing and equipment stocks) are collected weekly from the four countries neighbouring EVD-affected countries.
- EVD Preparedness technical assistance missions are currently underway in Togo and Gambia (11–18 March), with a focus on logistics, coordination, and infection control.
- Follow-up PST support is planned for all priority countries with a focus on the following:
    - Provision of tailored, targeted technical guidance tools and support to strengthen EVD preparedness capacities; operationalize plans; test and improve procedures through field exercises and drills; and support the implementation of preparedness plans , including logistics support;
    - Foster inter-country collaboration and networking, including cross-border communication, cooperation, and exchanges;
    - Provide leadership and coordinate partners to fully support one national plan and the steering role of national authorities;
    - Coordinate global advocacy and support to EVD preparedness, document and disseminate experiences, lessons learnt and good practices, monitor progress, and evaluate outcomes;
    - Strengthen the implementation of the International Health Regulations, and ensure that the core capacities to manage health emergencies are at the heart of resilient health systems.
- A Pilot Rapid Response 4-day training course with the Eastern Mediterranean Regional Office (EMRO) will take place in Sudan (16–19 March 2015) in order to trial a training package for use in EMRO and other WHO regional offices.

Cross-border collaboration

During the week to 1 March, five cross-border meetings took place, including a coordination meeting in Kambia and Forecariah. This meeting was held on both sides of the border to facilitate communication, to share best practices, and to align strategies.

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	WHO
Case finding, lab and contact tracing	WHO
Safe and dignified burials	International Federation of Red Cross and Red Crescent Societies (IFRC)
Community engagement and social mobilization	UNICEF

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

Indicator	Numerator	Numerator Source	Denominator	Denominator Source
Cases and deaths				
Number of confirmed cases	# of confirmed cases	Guinea: Daily WHO situation reports Liberia/Sierra Leone: 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: 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: Ministry of Health	N/A	N/A
Contact tracing				
Percent of new confirmed cases from registered contacts	# of new confirmed cases registered as a contact	Guinea: Weekly WHO situation reports Liberia: 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: 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
Infection Prevention and Control (IPC) and Safety				
Percent of IPC-assessed ETCs that met minimum IPC standards	# of IPC-assessed ETCs that met minimum IPC standards*	IPC Reports	# of IPC-assessed ETCs	IPC Reports
Number of newly infected health workers	# of newly infected health workers	Guinea: Daily WHO situation reports Liberia/Sierra Leone: Ministry of Health Ebola situation Reports	N/A	N/A
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	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

**A facility meets minimum standards when the average score for a selected list of IPC criteria is ≥ 80%.*