

**SUMMARY**

- The response to the EVD epidemic has now moved to a second phase, as the focus shifts from slowing transmission to ending the epidemic. To achieve this goal as quickly as possible, efforts have moved from rapidly building infrastructure to ensuring that capacity for case finding, case management, safe burials, and community engagement is used as effectively as possible.
- For the first time since the week ending 29 June, 2014, there have been fewer than 100 new confirmed cases reported in a week in the 3 most-affected countries. A combined total of 99 confirmed cases were reported from the 3 countries in the week to 25 January: 30 in Guinea, 4 in Liberia, and 65 in Sierra Leone.
- Case incidence continues to fall in Liberia and Sierra Leone. Guinea reported 30 confirmed cases in the week to 25 January, up from 20 confirmed cases in the previous week.
- The north Guinean prefecture of Mali, which borders Senegal, has reported its first confirmed case.
- In the week to 18 January, 6 of 20 (30%) new confirmed and probable cases in Guinea arose among registered contacts. During the week to 25 January, 2 of 4 (50%) new confirmed cases in Liberia arose among known contacts. Equivalent data are not yet available for Sierra Leone. The target is for 100% of new cases to arise among known contacts, so that each and every chain of transmission can be tracked and terminated.
- In the 21 days to 25 January, it took an average of 0.7 days in Guinea, 0.5 days in Liberia, and 0.8 days in Sierra Leone for a patient sample to go from collection through to the communication of the laboratory test result to a national ministry of health. The target is to have results within 24 hours of sample collection.
- The case fatality rate among hospitalized cases (calculated from all hospitalized cases with a reported definitive outcome) is between 54% and 62% in the 3 intense-transmission countries, with no indication of an improvement over time.
- All health care facilities in the 3 most-affected countries are assessed for their compliance with minimum standards of infection prevention and control (IPC), with the aim that 100% of facilities meet such standards. Data will soon be available on the proportion of health facilities that meet minimum IPC standards.
- A total of 816 confirmed health worker infections have been reported in the 3 intense-transmission countries; there have been 488 reported deaths. Neither Guinea nor Sierra Leone reported a health worker infection in the week to 25 January. Liberia reported 2 health worker infections during the same period, compared with 0 cases the previous week.
- A total of 27 sub-prefectures in Guinea reported at least one security incident or other form of refusal to cooperate in the week to 21 January. A total of 2 districts in Liberia and 4 districts in Sierra Leone reported at least one similar incident during the same reporting period.

## COUNTRIES WITH WIDESPREAD AND INTENSE TRANSMISSION

- There have been in excess of 22 000 reported confirmed, probable, and suspected cases (Annex 1) of EVD in Guinea, Liberia and Sierra Leone (table 1), with almost 8800 deaths (outcomes for many cases are unknown). A total of 30 new confirmed cases were reported in Guinea, 4 in Liberia, and 65 in Sierra Leone in the 7 days to 25 January.
- A stratified analysis of cumulative confirmed and probable cases indicates that the number of cases in males and females is similar (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 almost four times more likely to be affected than are children.
- A total of 816 confirmed health worker infections have been reported in the 3 intense-transmission countries; there have been 488 reported deaths (table 3).

**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	2569	92	1578
	Probable	332	*	332
	Suspected	16	*	‡
	<b>Total</b>	<b>2917</b>	<b>92</b>	<b>1910</b>
Liberia	Confirmed	3138	20	‡
	Probable	1864	*	‡
	Suspected	3620	*	‡
	<b>Total</b>	<b>8622</b>	<b>20</b>	<b>3686</b>
Sierra Leone	Confirmed	7968	366	2833
	Probable	287	*	208
	Suspected	2263	*	158
	<b>Total</b>	<b>10 518</b>	<b>366</b>	<b>3199</b>
<b>Total</b>		<b>22 057</b>	<b>478</b>	<b>8795</b>

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.

## GUINEA

- Key performance indicators that monitor the EVD response in Guinea are shown in table 4.
- A total of 30 confirmed cases were reported in the 7 days to 25 January 2015 (figure 1), compared with 20 the week before. This is the first time this year that case incidence has increased in Guinea from week-to-week. Eight districts reported a confirmed or probable case during the reporting period (figure 1).
- The northern district of Mali, which borders Senegal, reported its first confirmed case (figure 4); a man who travelled from Liberia. Senegal has recently reopened border crossings with Guinea; surveillance in districts that border affected countries is being implemented.
- With 15 confirmed cases, the western district of Forecariah was the worst-affected district in Guinea, accounting for half of all confirmed cases in the week to 25 January. Forecariah borders the Sierra Leonean district of Kambia to the south, which reported 10 confirmed cases during the reporting period: the third highest weekly total of any district in Sierra Leone. There have recently been reports of high levels of community resistance to EVD response measures in Forecariah, indicating a need to better engage the community in the response.
- Conakry reported 6 confirmed cases (figure 1). The districts of Kissidougou and Macenta both reported their first confirmed cases in 21 days. 12 districts that have previously reported confirmed cases did not report any confirmed cases in the 21 days to 25 January; 3 have reported no cases for over 100 days (figure 4, figure 5).

- The mean laboratory processing time for Guinea in the 21 days to 25 January (data available for 3 districts) was 0.7 days (range 0.0–1.1 days); processing time is calculated by subtracting the date a sample is collected from the date the results of the sample are communicated to the national ministry of health. If results are returned on the day of collection, processing time is recorded as 0 days; therefore the average processing time in Guinea was between 1 and 2 days. Laboratory locations are shown in Figure 7.
- In the week to 25 January, 30% of new confirmed cases arose among registered contacts; a fall from 53% the previous week. This may be attributable to the high proportion of new cases that arose in Forecariah, where efforts to engage the local community in response efforts need to be intensified.
- Of the 16 confirmed EVD deaths that occurred in the week to 18 January, 19% occurred in the community. Ideally all cases should be identified and treated in an Ebola-specific facility; there should be no EVD-related deaths in the community.
- In the week to 18 January, 29 unsafe burials were reported.

**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*		By age group†		
	(per 100 000 population)		(per 100 000 population)		
	Male	Female	0–14 years	15–44 years	45+ years
Guinea	1341 (25)	1438 (26)	443 (10)	1572 (34)	742 (47)
Liberia	2550 (128)	2447 (124)	829 (48)	2671 (156)	1019 (191)
Sierra Leone	5185 (182)	5501 (190)	2326 (96)	5777 (223)	2414 (327)

Population figures are based on estimates from the United Nations Department of Economic and Social Affairs.<sup>1</sup> \*Excludes cases for which data on sex are not available. †Excludes cases for which data on age are not available.

**Table 3: Ebola virus disease infections and deaths in health workers in the three countries with intense transmission**

Country	Cases	Deaths
Guinea	162	88
Liberia	371	179
Sierra Leone	283	221
<b>Total</b>	<b>816</b>	<b>488</b>

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

## LIBERIA

- Key performance indicators that monitor the EVD response in Liberia are shown in table 4.
- Case incidence has declined from a peak of over 300 new confirmed cases per week in August and September 2014 to 4 confirmed cases in the 7 days to 25 January 2015 (figure 2), compared with 8 cases the previous week.
- All 4 confirmed cases were reported from Montserrado, the district that includes the capital, Monrovia (figure 2 and figure 4). The adjacent district of Bomi reported 3 probable cases.
- Locations of Ebola treatment centres (ETCs) are shown in figure 6.
- The mean laboratory processing time for Liberia in the 21 days to 25 January was 0.5 days (range 0.0–7.0); processing time is calculated by subtracting the date a sample is collected from the date the results of the sample are communicated to the national ministry of health. If results are returned on the day of sample collection, processing time is recorded as 0 days. Laboratory locations are shown in Figure 7.
- In the week to 22 January, 50% of new confirmed cases arose among registered contacts; a fall from 88% of cases during the previous 21-day period.
- In the 21 days to the 22 January, 3 unsafe burials were reported.

<sup>1</sup> 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

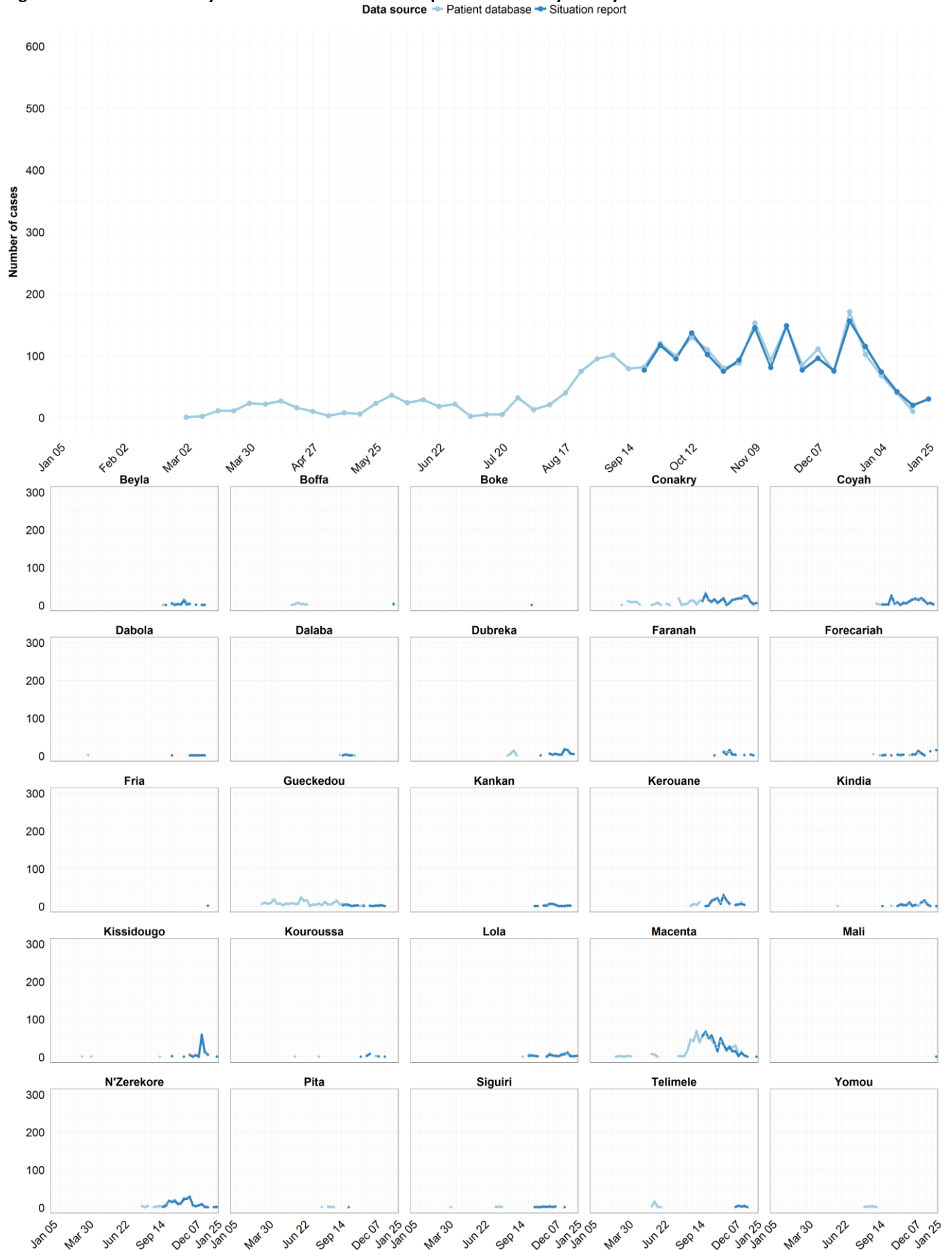
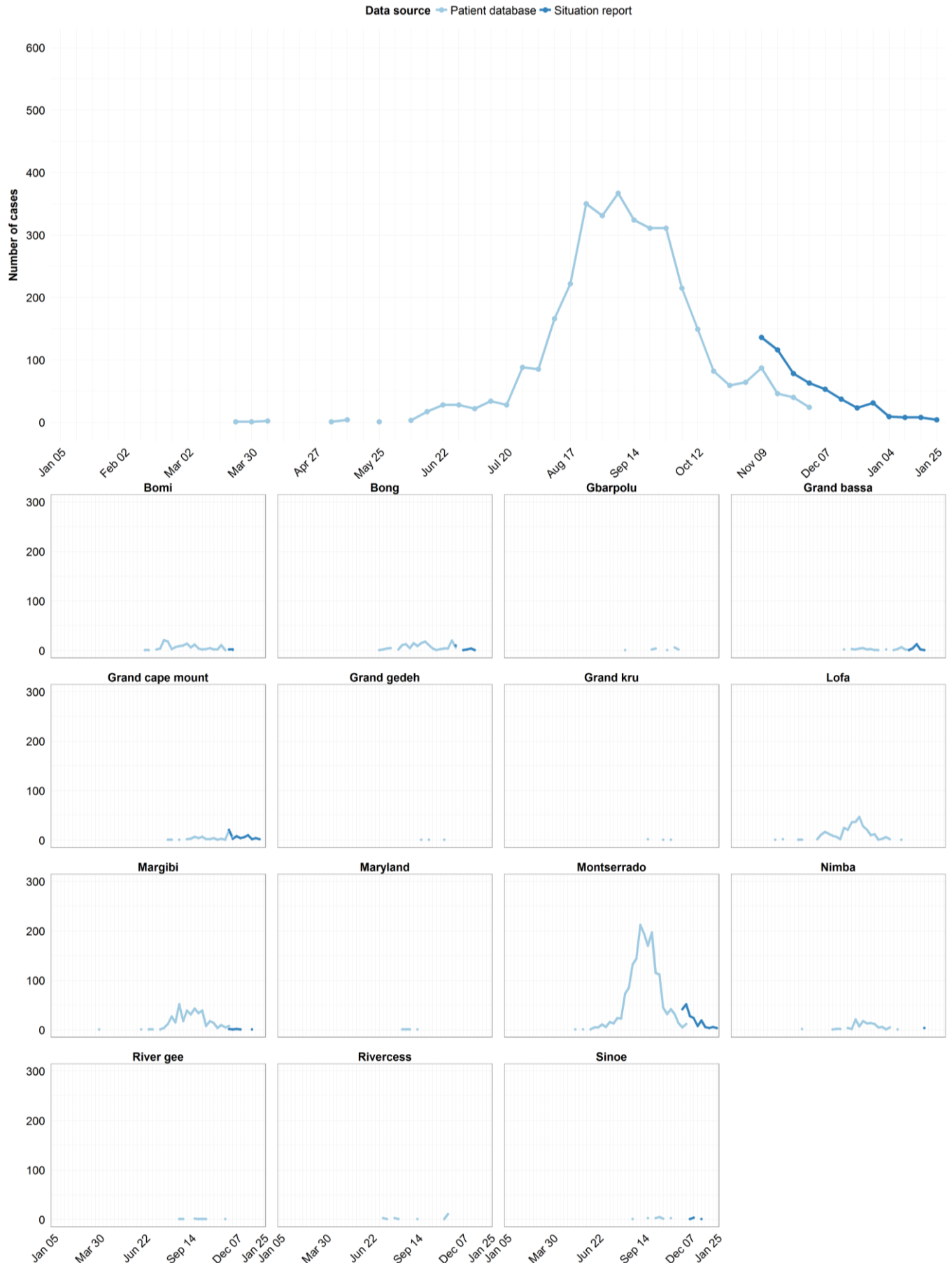


Figure 2: Confirmed weekly Ebola virus disease cases reported nationally and by district from Liberia



Systematic data on laboratory confirmed cases have been available since 3 November nationally, and since 16 November for each district.

**Table 4: Key performance indicators for Phase 2 of the Ebola response**

Indicator	Target	Guinea			Liberia			Sierra Leone		
		11 Jan	18 Jan	25 Jan	11 Jan	18 Jan	25 Jan	11 Jan	18 Jan	25 Jan
<b>Cases and deaths</b>										
Number of confirmed cases	Zero	42	20	30	8	8	4	184	117	65
Number of confirmed deaths	Zero	31	16	21	2	4	4	119	83	54
Percent of confirmed deaths that occurred in the community	Zero	3%	19%		Data not yet available					30%
<b>Diagnostic services</b>		22 Dec - 11 Jan	29 Dec - 18 Jan	5 Jan - 25 Jan	22 Dec - 11 Jan	29 Dec - 18 Jan	5 Jan - 25 Jan	22 Dec - 11 Jan	29 Dec - 18 Jan	5 Jan - 25 Jan
Time from sample collection to result returned to the ministry of health <sup>†</sup> (days)	Zero	0.1	0.2	0.7	0.4	0.5	0.5	0.9	0.9	0.8
<b>Contact tracing</b>		11 Jan	18 Jan	25 Jan	7 Jan*	15 Jan*	22 Jan*	11 Jan	18 Jan	25 Jan
Percent of new confirmed cases from registered contacts	100%	53% <sup>#</sup>	30% <sup>#</sup>		14%	88%	50%	Data not yet available		
<b>Outcome of treatment</b>		6 Oct - 2 Nov	3 Nov - 30 Nov	1 Dec - 28 Dec	8 Sept - 5 Oct	6 Oct - 2 Nov	3 Nov - 30 Nov	11 Aug - 7 Sept	8 Sept - 5 Oct	6 Oct - 2 Nov
Case fatality rate (among hospitalized cases) <sup>††</sup>	<40%	62%	57%	54%	55%	54%	58%	59%	59%	61%
<b>IPC and Safety</b>		11 Jan	18 Jan	25 Jan	11 Jan	18 Jan	25 Jan	11 Jan	18 Jan	25 Jan
Percent of assessed Ebola health facilities that meet minimum IPC standards	100%	Data not yet available			Data not yet available			Data not yet available		
Number of newly infected health workers <sup>**</sup>	Zero	4	2	0	1	0	2	0	0	0
<b>Safe and dignified burials</b>		11 Jan	18 Jan	25 Jan	1 Jan - 22 Jan			11 Jan	18 Jan	25 Jan
Number of unsafe burials reported	Zero	15	29		3	Data not yet available				
<b>Social mobilization</b>		11 Jan	18 Jan	21 Jan	11 Jan	18 Jan	21 Jan	11 Jan	18 Jan	21 Jan
Number of districts <sup>‡</sup> with at least one security incident or other form of refusal to cooperate	Zero	27	27	27	2	2	2	4	4	4

For definitions of key performance indicators see Annex 2. For the lead agencies coordinating the 4 key lines of action see Annex 3. \*A different time period is used for Liberia. <sup>†</sup>Processing time of samples is calculated for the 21 days up to the 11, 18, and 25 January. If results are returned on the day of collection processing time is recorded as 0 days. <sup>#</sup>Includes new confirmed and probable cases. <sup>\*\*</sup>Does not include members of foreign medical teams. <sup>‡</sup>As reported by UNICEF; out of 340 sub-prefectures in Guinea, 15 counties in Liberia, and 14 districts in Sierra Leone. <sup>††</sup>The case fatality rate is measured over three non-overlapping 4-week periods; robust outcome data is available up to 28 December for Guinea, 30 November for Liberia, and 2 November for Sierra Leone.

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

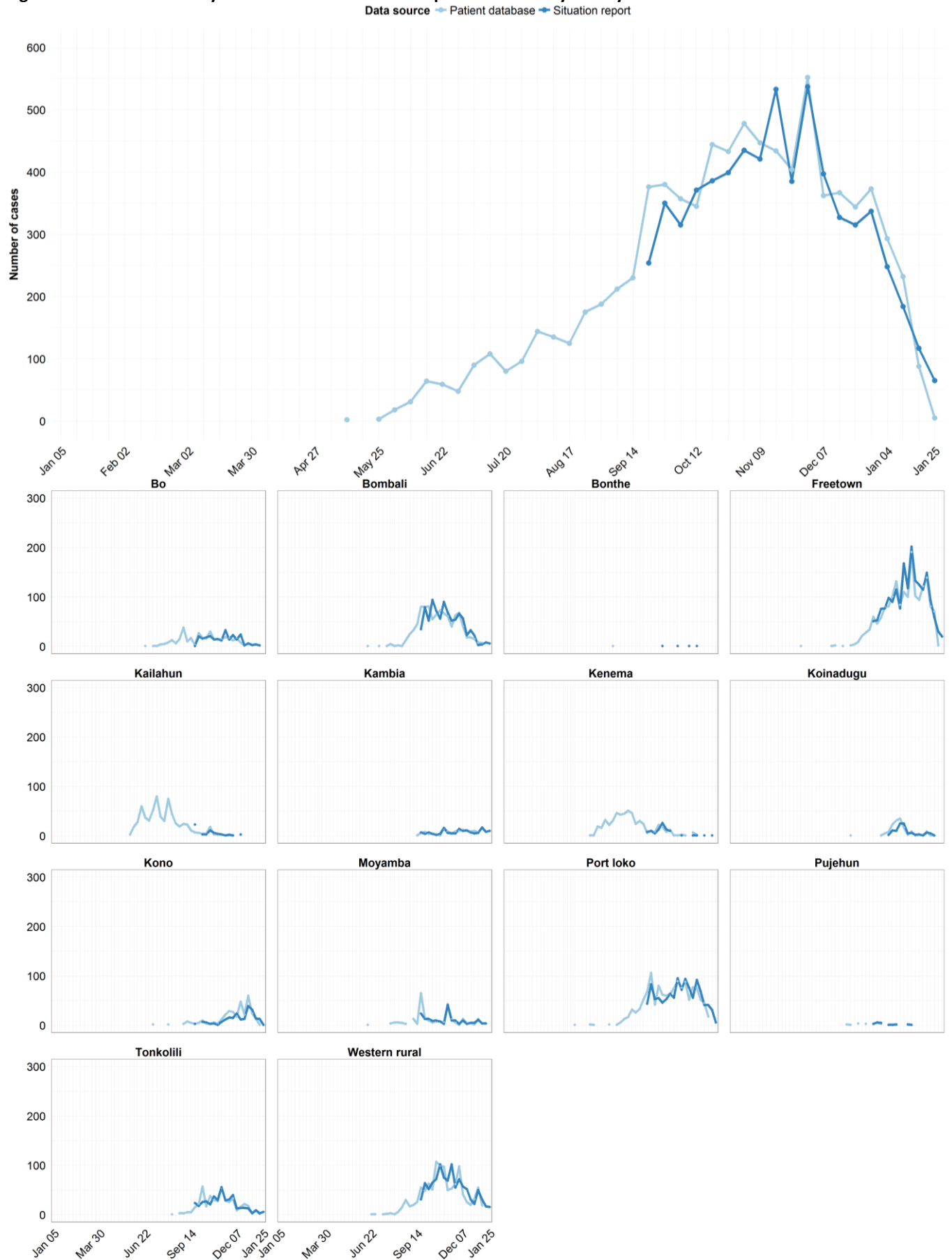
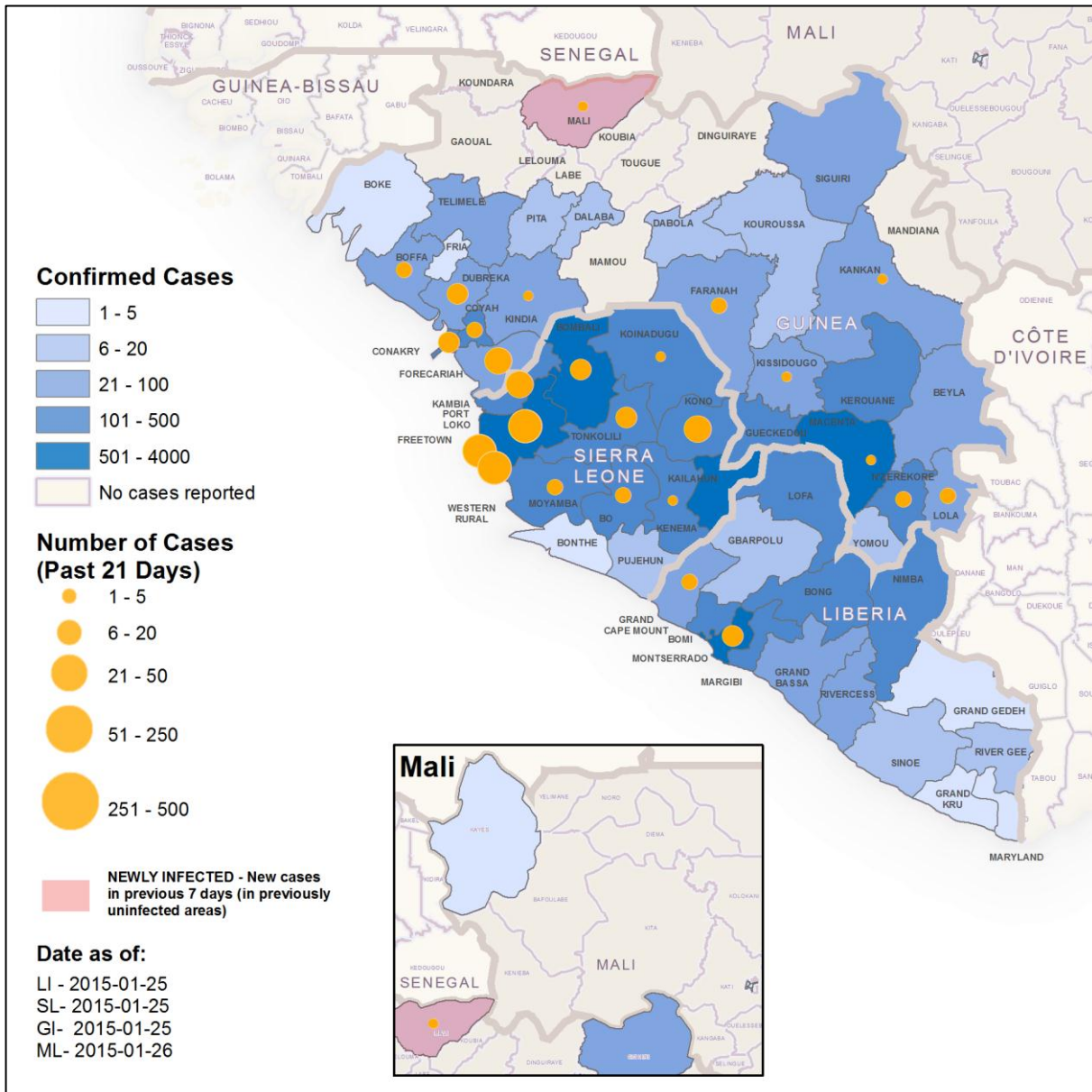




Figure 4: Geographical distribution of new and total confirmed cases



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 that monitor the EVD response in Sierra Leone are shown in table 4.
- Case incidence continues to decline rapidly in Sierra Leone. There were 65 new confirmed cases reported in the week to 25 January 2015, compared with 117 the previous week and 184 the week before that.
- The west of the country remains the area of most intense transmission. The capital, Freetown, reported 20 new confirmed cases, compared with 30 the previous week. The nearby districts of Kambia and Western Rural reported 10 and 16 new confirmed cases, respectively, in the 7 days to 25 January (figure 3, figure 4).
- Kambia borders the Guinean district of Forecariah (figure 4), which has reported an increase in cases in over the past 2 weeks.
- The western district of Port Loko reported 6 new confirmed cases, its lowest total since the week ending 3 August 2014.
- A total of 7 out of 14 districts reported new confirmed cases in the latest reporting period. Kailahun, which borders Gueckedou, has reported now no confirmed cases for 44 days (figure 5).



- The district of Kono in the east of the country, also on the border with Guinea, reported a single confirmed case during the reporting period, compared with 13 cases the previous week.
- Locations of Ebola treatment centres (ETCs) are shown in figure 6.
- The mean laboratory processing time for Sierra Leone in the 21 days to 25 January was 0.8 days (range 0.5–4.1 days); processing time is calculated by subtracting the date and time a sample is collected from the date and time the results of the sample are communicated to the national ministry of health. If results are returned on the day of collection processing time is recorded as 0 days. Laboratory locations are shown in Figure 7.

Figure 5. Days since last reported confirmed case by district in Guinea, Liberia, and Sierra Leone

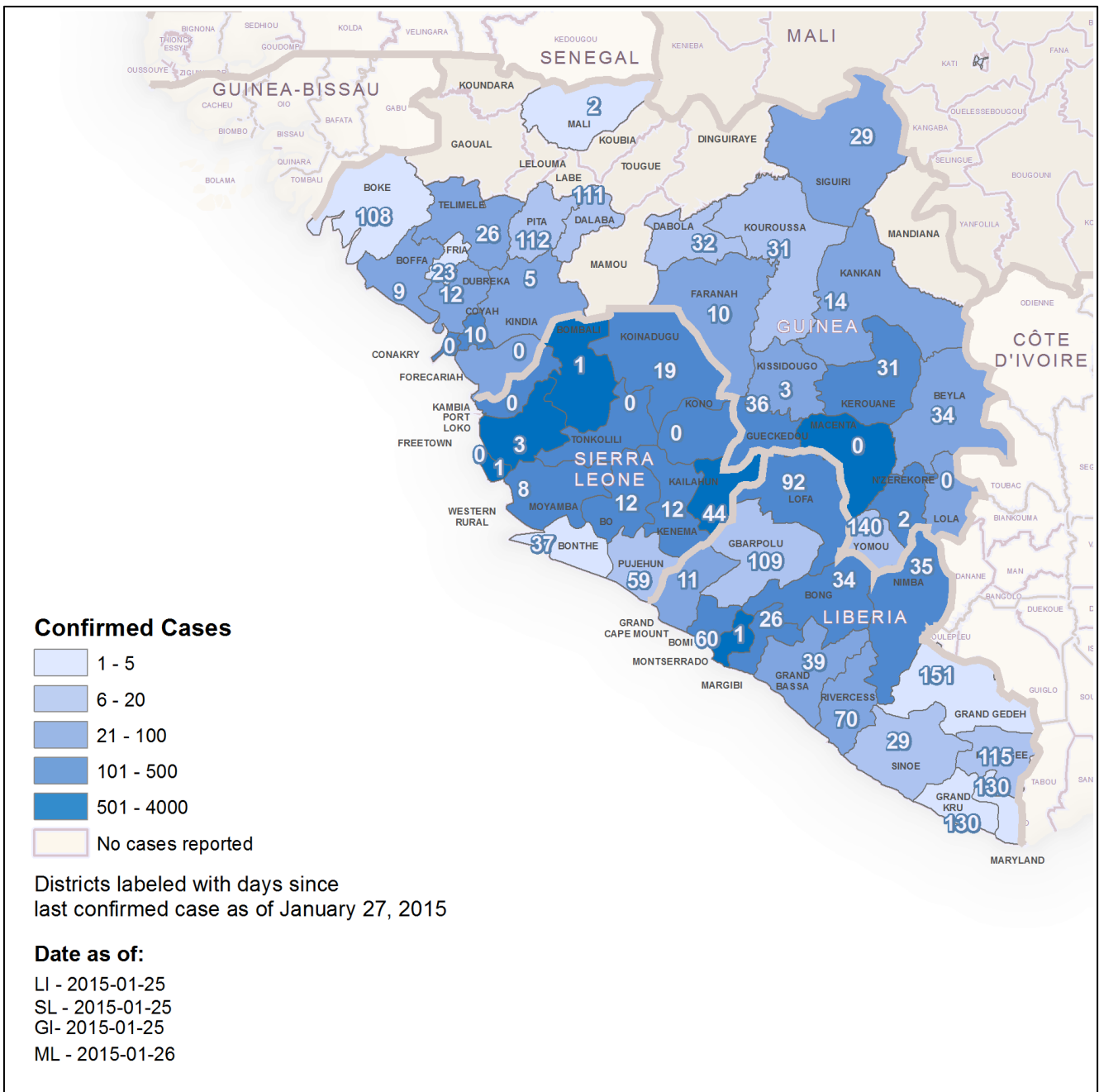
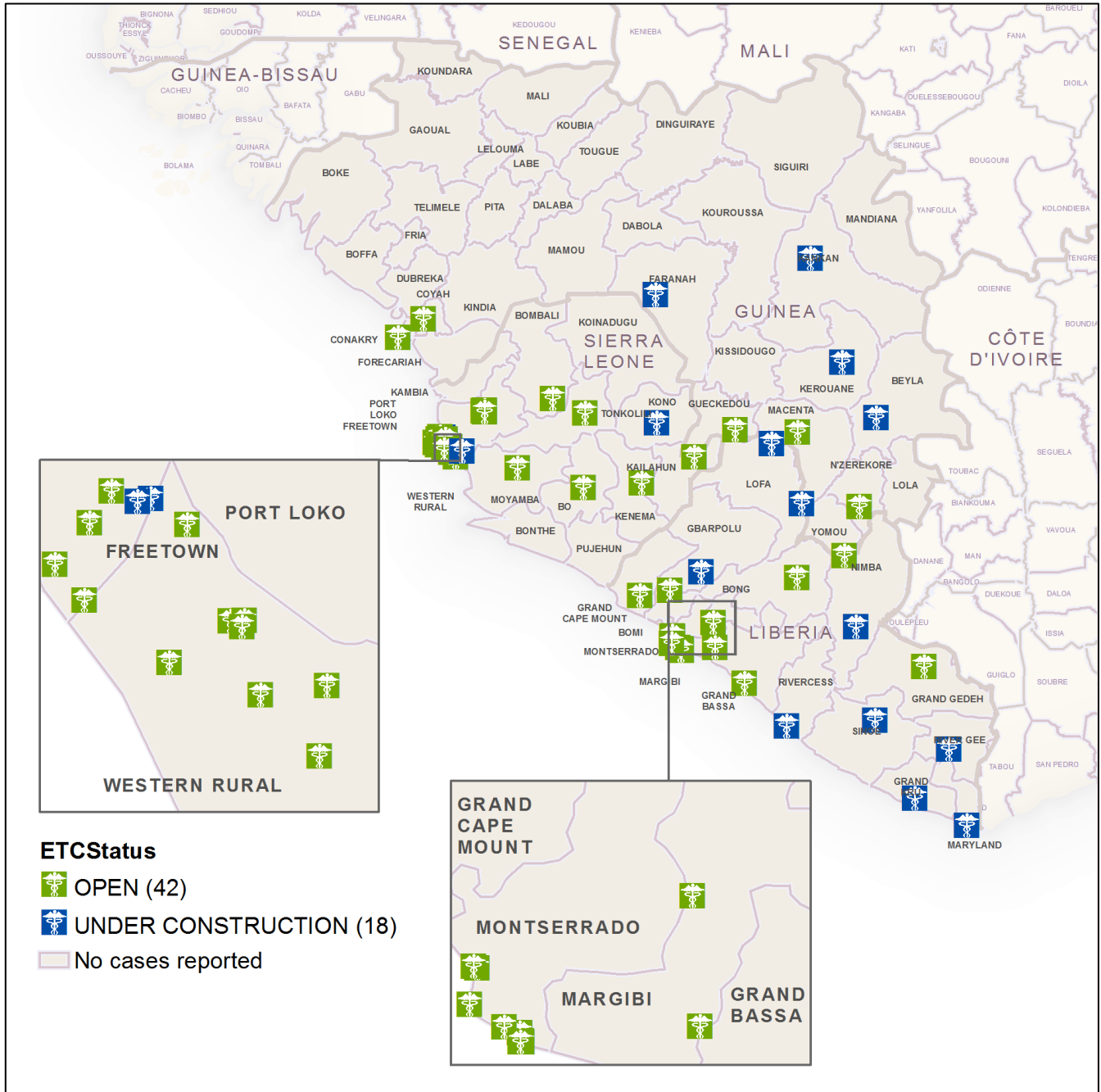


Figure 6. Location of Ebola treatment centres in Guinea, Liberia, and Sierra Leone



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

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

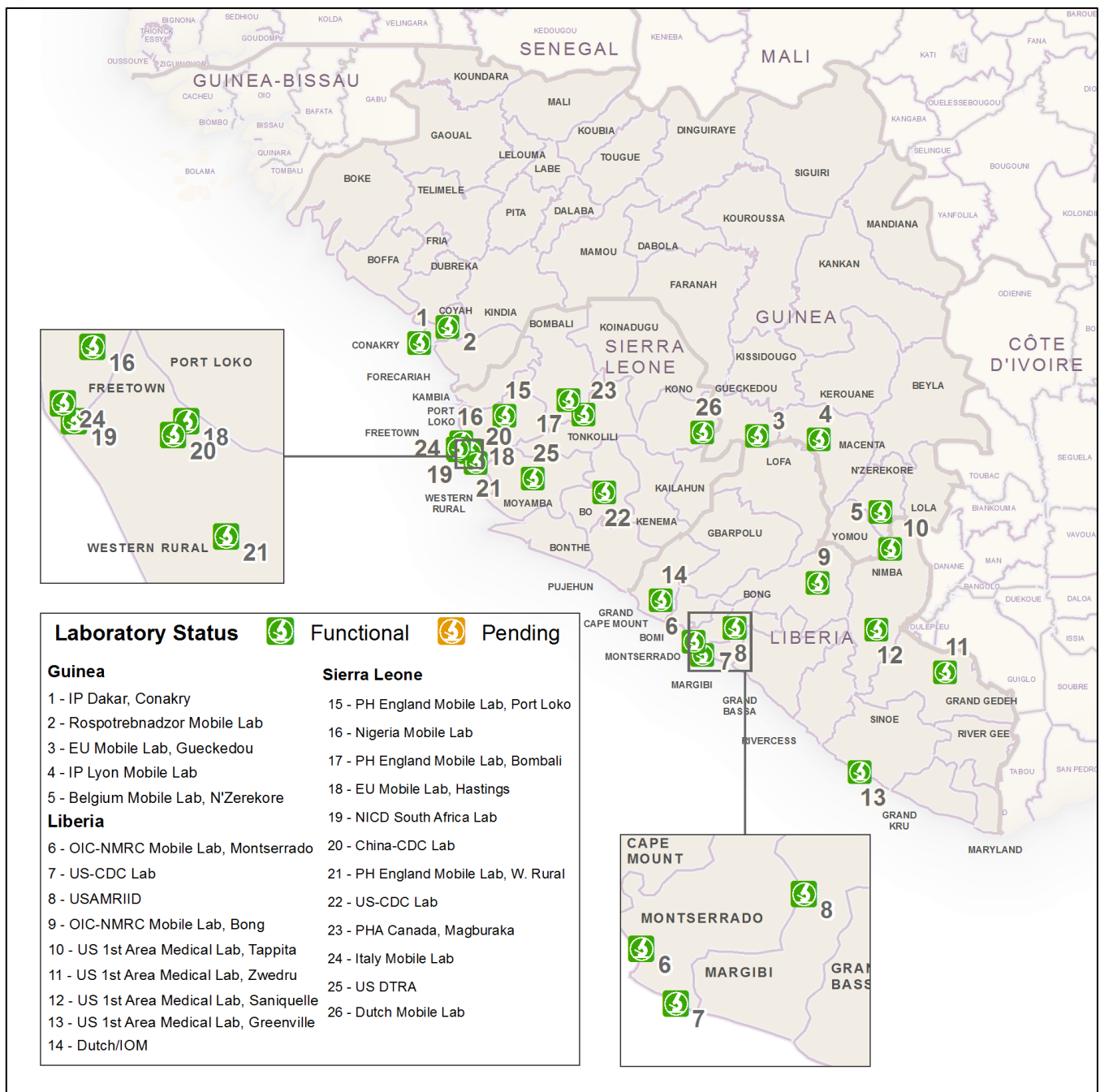
- Six countries (Mali, Nigeria, Senegal, Spain, the United Kingdom and the United States of America) have reported a case or cases imported from a country with widespread and intense transmission.
- In the United Kingdom, public health authorities confirmed a case of EVD in Glasgow, Scotland, on 29 December 2014 (table 5). The case was a health worker who returned from volunteering at an ETC in Sierra Leone. The patient was isolated on 29 December and received treatment in London. On 23 January the patient tested negative twice for EVD, and on 24 January the patient was discharged. All contacts have completed 21-day follow-up.

Table 5: Ebola virus disease cases and deaths in the United Kingdom

Country	Cumulative cases					Contact tracing			
	Confirmed	Probable	Suspect	Deaths	Health workers	Contacts under follow-up	Contacts who have completed 21-day follow-up	Date last patient tested negative	Number of days since last patient tested negative
United Kingdom	1	0	0	0	100%	0	55	23/01/2015	4

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.

Figure 7. Location of laboratories in Guinea, Liberia, and Sierra Leone



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

- The introduction of a 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 support teams (PSTs), direct technical assistance to countries, and the provision of technical guidance and tools.

### Tools and resources for preparedness

- Building on existing national and international preparedness efforts, a set of tools has been developed to support any country to identify opportunities for improvements to intensify and accelerate their readiness. The WHO EVD Preparedness Checklist<sup>2</sup> identifies 11 key components and tasks for countries preparing their health systems to identify, detect and respond to EVD. The 11 components include: overall coordination, rapid response, public awareness and community engagement, infection prevention and control, case management, safe burials, epidemiological surveillance, contact tracing, laboratory capacity, logistics, and capacity building for points of entry. A revised list of technical guidelines and related training materials by preparedness component has been finalized and can be found on the revised WHO preparedness website.<sup>3</sup>

### 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, 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.
- Following PST missions, countries that share borders with the countries with intense transmission have taken additional action to prepare for an imported case.
- A consultative meeting between WHO and partners on EVD preparedness and readiness took place in Geneva between 14 and 16 January. At the meeting an in-depth review of the consolidated checklist for Ebola Preparedness highlighted key gaps and areas to be addressed, including community engagement, infection prevention and control, contact tracing and logistics. A dashboard was also presented which allowed partners to accurately target needs and gaps. This will be used to support in-country preparedness efforts by national authorities. In the coming months, WHO will organize follow up missions to assess progress against 90-day plans, conduct simulation exercises in collaboration with partners, complete the provision of Personal Protective Equipment (PPE) to all fourteen countries, and coordinate WHO and partner engagement with countries. Participants agreed on an action plan and timeline for moving ahead.

### Preparedness in the rest of the world

- Beyond the focus on priority countries in Africa, significant efforts have been made in all WHO Regions to strengthen Ebola preparedness. Assessments in several countries in all Regions found that there are still significant gaps and needs related to risk communication, infection prevention and control, laboratory infrastructure, case management and points of entry. There is also a need for standard operating procedures

<sup>2</sup> <http://www.who.int/csr/resources/publications/ebola/ebola-preparedness-checklist/en/>

<sup>3</sup> <http://www.who.int/csr/resources/publications/ebola/preparedness/en/>

for rapid response teams. Globally, more than 110 countries have been supported to strengthen their public health response capacities in relation to EVD. Regional Offices have already, or are in the process of, conducting regional/subregional training workshops on risk communication, laboratory testing and biosafety, infection prevention and control, and case management. At the country level WHO has also supported the organization of national workshops and simulation exercises to continue to address these gaps.

- A global strategy for personal protective equipment and infection control supplies has been developed and supplies have been or are being procured and strategically deployed/stockpiled to ensure their availability in the event of importation in any country of the world.

## ANNEX 1: CATEGORIES USED TO CLASSIFY EBOLA CASES

### Ebola virus disease case-classification criteria

Classification	Criteria
<b>Suspected</b>	Any person, alive or dead, who has (or had) sudden onset of high fever and had contact with a suspected, probable or confirmed Ebola virus disease (EVD) case, or a dead or sick animal OR any person with sudden onset of high fever and at least three of the following symptoms: headache, vomiting, anorexia/loss of appetite, diarrhoea, lethargy, stomach pain, aching muscles or joints, difficulty swallowing, breathing difficulties, or hiccup; or any person with unexplained bleeding OR any sudden, unexplained death.
<b>Probable</b>	Any suspected case evaluated by a clinician OR any person who died from 'suspected' EVD and had an epidemiological link to a confirmed case but was not tested and did not have laboratory confirmation of the disease.
<b>Confirmed</b>	A probable or suspected case is classified as confirmed when a sample from that person tests positive for EVD in the laboratory.

## ANNEX 2: COORDINATION OF THE EBOLA RESPONSE ALONG 4 LINES OF ACTION

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
Community engagement and social mobilization	UNICEF

## ANNEX 3: DEFINITIONS OF KEY PERFORMANCE INDICATORS

Response monitoring indicators are calculated using the following numerators and denominators:

Indicator	Numerator	Numerator source	Denominator	Denominator source
<b>Cases and deaths</b>				
Number of confirmed cases	# of confirmed cases	Country situation reports	N/A	N/A
Number of confirmed deaths	# of confirmed deaths	Country situation reports	N/A	N/A
Percent of confirmed deaths that occurred in the community	# of deaths in the community with positive EVD swab results	Guinea: Weekly country situation reports Sierra Leone: Ministry of Health / National Ebola Response Centre (NERC)	# of confirmed deaths	Country situation reports
<b>Diagnostic services</b>				
Time from sample collection to result returned to the ministry of health <sup>†</sup> (days)	Mean # of days between sample collection and sample testing	Lab database	N/A	N/A
<b>Contact tracing</b>				
Percent of new confirmed cases from registered contacts	# of new confirmed cases registered as a contact (includes probable cases in Guinea)	Guinea: Weekly country situation reports Liberia: Incident Management System	Number of new confirmed cases (includes probable cases in Guinea)	Country situation reports
<b>Outcome of treatment</b>				
Case fatality rate (among hospitalized cases)	# of deaths among hospitalized cases	Clinical investigation records	# of hospitalized cases with probable or confirmed EVD for whom a definitive survival outcome is reported	Clinical investigation records
<b>IPC and Safety</b>				
Percent of assessed Ebola health facilities meeting minimum IPC standards	# of assessed Ebola health facilities meeting minimum IPC standards	IPC Reports	# of assessed Ebola health facilities	IPC Reports
Number of newly infected health workers	# of newly infected health workers (does not include foreign medical teams)	Country situation reports	N/A	N/A
<b>Safe and dignified burials</b>				
Number of unsafe burials reported	# of burials reported that were not known to be safe	Guinea: Weekly country situation reports Liberia: UNMEER SDB Coordinator	N/A	N/A
<b>Social mobilization</b>				
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	UNICEF	N/A	N/A