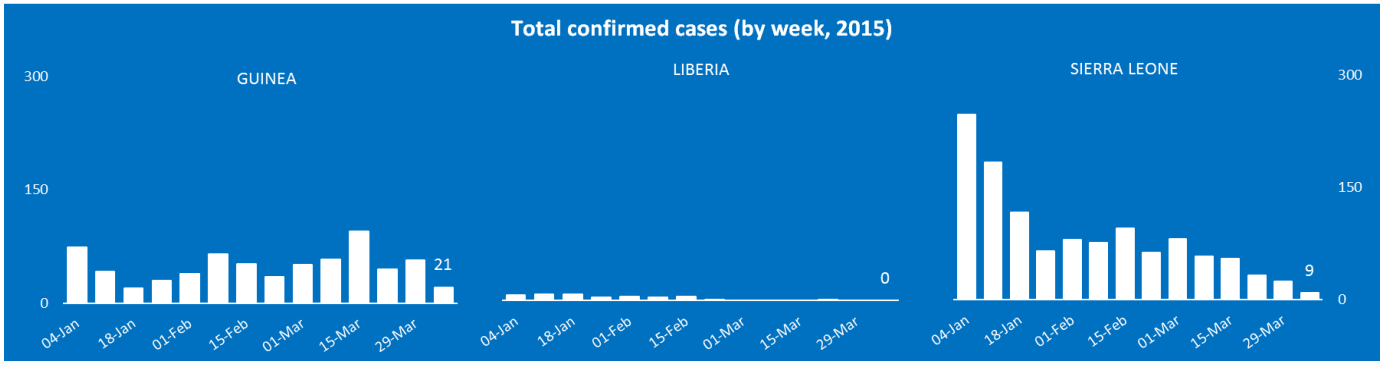
World Health Organization

EBOLA SITUATION REPORT

8 APRIL 2015



SUMMARY

- A total of 30 confirmed cases of Ebola virus disease (EVD) were reported in the week to 5 April. This is the lowest weekly total since the third week of May 2014. Case incidence in Guinea decreased to 21, compared with 57 confirmed cases the previous week. Liberia reported no confirmed cases. Sierra Leone reported a fifth consecutive weekly decrease from 25 confirmed cases in the week to 29 March to 9 in the week to 5 April.
- A total of 6 Guinean prefectures reported at least one confirmed case in the week to 5 April, compared with 7 the previous week. Affected prefectures were in the western area, around and including the capital, Conakry. In total, 10 prefectures/districts in Guinea and Sierra Leone reported a confirmed case in the week to 5 April, compared with 12 the previous week. Of 55 districts in Guinea, Liberia, and Sierra Leone that have reported at least one confirmed case of EVD since the start of the outbreak, 35 have not reported a case for over 6 weeks.
- In the context of falling case incidence and a receding zone of transmission, treatment capacity exceeds demand in Liberia and Sierra Leone. Accordingly, and with technical guidance from WHO, national authorities in both countries have begun to implement plans for the phased safe decommissioning of surplus facilities. Each country will retain a core capacity of high-quality Ebola treatment centres, strategically located to ensure complete geographic coverage, with additional rapid-response capacity held in reserve.
- Response indicators for Guinea continue to present a mixed picture. Of 19 confirmed deaths from EVD in the week to 5 April, 7 (37%) were identified post-mortem in the community, compared with 15 of 35 (43%) the previous week. However, 21 unsafe burials were reported over the same period, compared with 20 the previous week. The proportion of confirmed cases that arose among registered contacts decreased slightly, from 53% in the week to 22 March to 48% in week to 29 March. Taken together these data indicate that though surveillance is improving, unknown chains of transmission could be a source of new infections in the coming weeks.
- In Sierra Leone, cases were reported from 4 western districts: Kambia (2 cases), Port Loko (1 case), Western Area Rural (1 case), and Western Area Urban (5 cases), which includes the capital, Freetown.
- Sierra Leone reported zero cases on 3 days during the week to 5 April. The absence of any reported unsafe burials over the same period, the low proportion of all EVD-positive deaths (3 of 32: 9%) that were identified in the community after post-mortem testing, and the low proportion of laboratory samples that tested EVD-positive (10 of 1524: 1%) over the same period strengthen confidence that the downward trend in case incidence will be continued. However, the proportion of cases that arose among registered contacts fell for the second consecutive week to 56% in the week to 29 March (the most recent week for which data are available), suggesting that challenges remain.
- The last confirmed case in Liberia died on 27 March. Investigations are ongoing to establish the origin of infection. A total of 332 contacts associated with the case are being monitored. Heightened vigilance is being maintained throughout the country. In the week to 29 March, 310 laboratory samples were tested for EVD, with no confirmed cases.
- There were no new health worker infections in the week to 5 April, with the cumulative total remaining at 861 since the start of the outbreak. In accordance with the 45-day reinforcement of emergency measures declared in western Guinea, several private clinics have been closed after EVD cases were treated on the premises.

COUNTRIES WITH WIDESPREAD AND INTENSE TRANSMISSION

- There have been a total of 25 515 reported confirmed, probable, and suspected cases[1] 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 21 new confirmed cases were reported in Guinea, 0 in Liberia, and 9 in Sierra Leone in the 7 days to 5 April.

Figure 1: Confirmed, probable, and suspected EVD cases worldwide (data up to 5 April 2015)

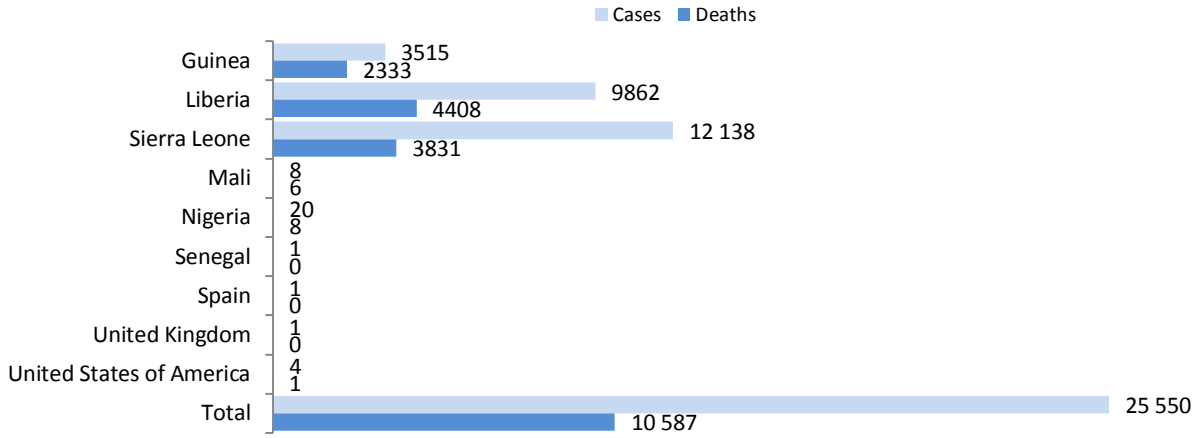


Table 1: Confirmed, probable, and suspected EVD cases in Guinea, Liberia, and Sierra Leone

Country	Case definition	Cumulative cases	Cases in past 21 days	Cumulative deaths
Guinea	Confirmed	3089	123	1919
	Probable	414	*	414
	Suspected	12	*	‡
	Total	**3515**	**123**	**2333**
Liberia	Confirmed	3151	1	‡
	Probable	1879	*	‡
	Suspected	4832	*	‡
	Total	**9862**	**1**	**4408**
Sierra Leone	Confirmed	8554	67	3465
	Probable	287	*	208
	Suspected	3297	*	158
	Total	**12 138**	**67**	**3831**
Total	Confirmed	14 794	191	‡
	Probable	2580	*	‡
	Suspected	8141	*	‡
	Total	**25 515**	**191**	**10 572**

*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.*

[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

- 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 499 reported deaths (table 5).

GUINEA

- Key performance indicators for the EVD response in Guinea are shown in table 3.
- A total of 21 confirmed cases were reported in the 7 days to 5 April (figure 3), compared with 57 cases the previous week.
- A total of 6 prefectures reported at least one confirmed case, compared with 7 the previous week (figure 2; figure 6). Transmission remains centred in the west of the country, in and around the capital Conakry (8 confirmed cases). The nearby prefectures of Coyah (1 case), Dubreka (1 case), Forecariah (6 cases), Fria (1 case) and Kindia (4 cases) also reported cases (figure 2, figure 6). With the exception of Kindia, every prefecture reported a decrease in incidence compared with the previous week.
- Response indicators for Guinea continue to present a mixed picture. Of 19 confirmed deaths from EVD in the week to 5 April, 7 (37%) were identified post-mortem in the community, compared with 15 of 35 (43%) the previous week. However, 21 unsafe burials were reported over the same period, compared with 20 the previous week. The proportion of confirmed cases that arose among registered contacts decreased slightly, from 53% in the week to 22 March to 48% in week to 29 March. Of 498 laboratory samples tested in the week to 5 April, 13% tested positive for EVD. Taken together these data indicate that though surveillance is improving, there remain too many unknown chains of transmission to be confident that the recent fall in incidence will be sustained in the coming weeks.
- As part of the 45-day reinforcement of emergency measures in western Guinea, a 3-day door-to-door campaign to improve community participation in surveillance activities and identify suspected cases will begin on 10 April. Approximately 500 000 households in the prefectures of Boffa, Conakry, Coyah, Dubreka, Forecariah, and Kindia will be visited.
- Locations of 7 operational Ebola treatment centres (ETCs) are shown in figure 7. One ETC in the eastern prefecture of Gueckedou was decommissioned in the week to 5 April. In accordance with the 45-day reinforcement of emergency measures declared in western Guinean, several private clinics have been closed after EVD cases were treated on the premises. No new health worker infections were reported in the week to 5 April.
- Locations of the 8 operational laboratories in Guinea are shown in figure 8. Of 498 samples tested in the week to 29 March, 99% were processed within 1 day of arrival at a laboratory.

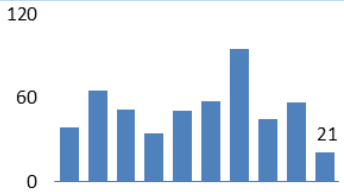
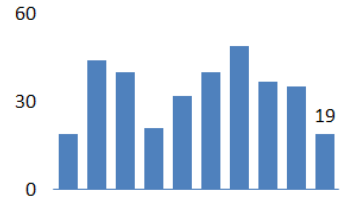
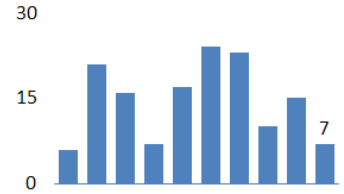
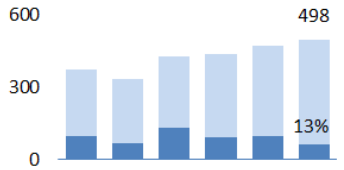
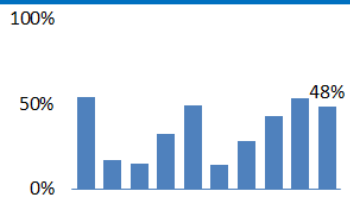
Table 2: Cumulative number of confirmed and probable cases by sex and age group in Guinea, Liberia, and Sierra Leone

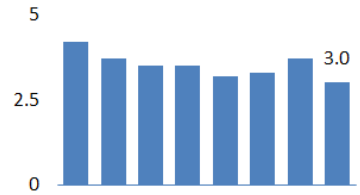
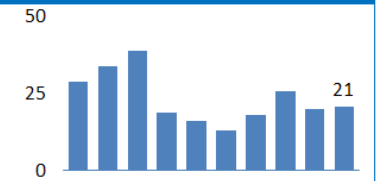
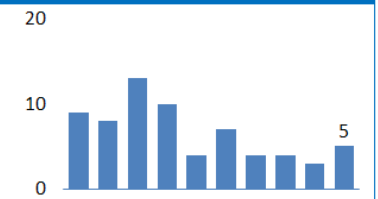
Country	Cumulative cases				
	By sex* (per 100 000 population)		By age group‡ (per 100 000 population)		
	Male	Female	0-14 years	15-44 years	45+ years
Guinea	1666 (31)	1804 (33)	553 (12)	1941 (42)	954 (61)
Liberia	2958 (149)	2891 (147)	993 (58)	3170 (186)	1208 (226)
Sierra Leone	5433 (191)	5768 (199)	2330 (96)	6231 (241)	2427 (328)

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

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

Indicator	Target	26 Jan – 5 Apr
Cases and deaths		
Number of confirmed cases	Zero	
Number of confirmed deaths	Zero	
Number of confirmed deaths that occurred in the community	Zero	
Diagnostic services		**23 Feb – 5 Apr**
Number of samples tested and the percent of positive EVD results*		
Contact tracing		**19 Jan - 29 Mar**
Percent of new confirmed cases from registered contacts	100%	

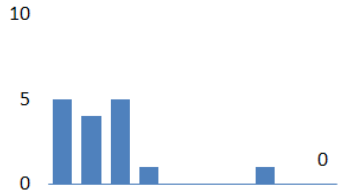
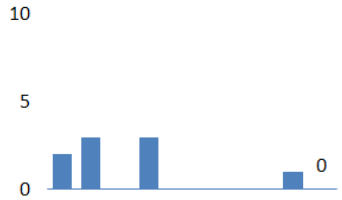
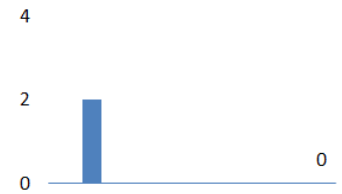
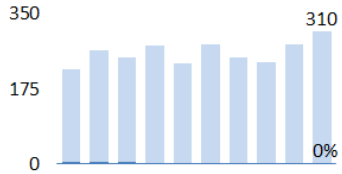
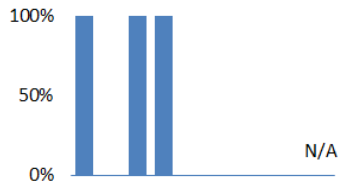
Indicator	Target	Aug - Mar
Hospitalization		
Time between symptom onset and hospitalization (days)‡	<2 days	
Outcome of treatment		**Aug - Feb**
Case fatality rate (among hospitalized cases)#	<40%	
IPC and safety		**26 Jan – 5 Apr**
Number of newly infected health workers	Zero	
Safe and dignified burials		**26 Jan – 5 Apr**
Number of reports of unsafe burials	Zero	
Community engagement		**26 Jan – 5 Apr**
Number of districts with at least one security incident or other form of refusal to cooperate	Zero	

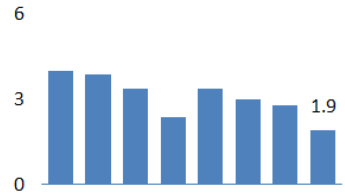
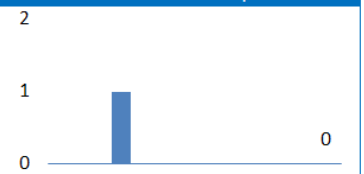
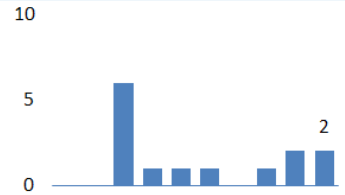
*For definitions of key performance indicators see Annex 2. Data are given for 7-day periods *Includes repeat samples. ‡Data missing for 0–3% of cases. #Outcome data missing for 1–14% of hospitalized confirmed cases. §Includes probable cases.*

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 5 April (figure 2; figure 4). The last confirmed case passed away on 27 March. A total of 332 contacts associated with the case are currently being monitored. Heightened vigilance is being maintained throughout the country. In the week to 5 April, 310 new laboratory samples were tested for EVD, none of which tested positive. All counties with the exception of Monsterrado have not reported a new case for over 6 weeks.
- Locations of the 17 operational Ebola treatment centres (ETCs) in Liberia are shown in figure 7. One ETC in Montserrado county was decommissioned in the week to 5 April.
- Locations of the 5 operational laboratories in Liberia are shown in figure 8. Of the 310 new samples that were tested in the week to 5 April, 86% were processed within 1 day of arrival at a laboratory.

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

Indicator	Target	26 Jan – 5 Apr
Cases and deaths		
Number of confirmed cases	Zero	
Number of confirmed deaths	Zero	
Number of confirmed deaths that occurred in the community	Zero	
Diagnostic services		26 Jan – 5 Apr
Number of samples tested and the percent of positive EVD results		
Contact tracing		26 Jan – 5 Apr
Percent of new confirmed cases from registered contacts	100%	

Indicator	Target	Aug - Mar
Hospitalization		
Time between symptom onset and hospitalization (days)‡	<2 days	
Outcome of treatment		Aug - Dec
Case fatality rate (among hospitalized cases)#	<40%	
IPC and safety		26 Jan – 5 Apr
Number of newly infected health workers	Zero	
Safe and dignified burials		26 Jan – 5 Apr
Number of reports of unsafe burials	Zero	
Community engagement		26 Jan – 1 Apr
Number of districts with at least one security incident or other form of refusal to cooperate	Zero	

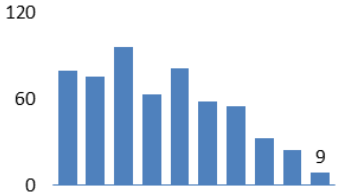
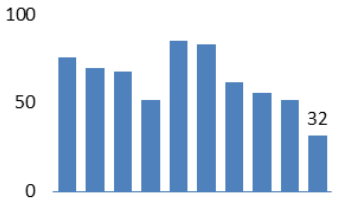
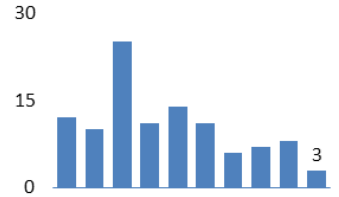
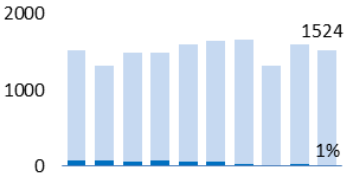
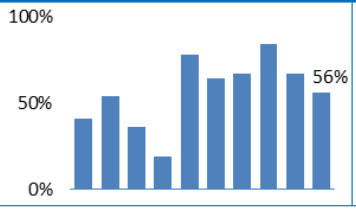
For definitions of key performance indicators see Annex 2. Data are for 7-day periods. ‡Data missing for 3–23% of cases. Outcome data missing for 2–41% of hospitalized confirmed cases.

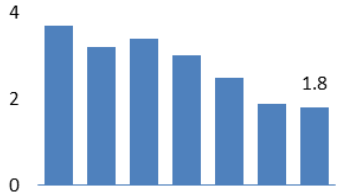
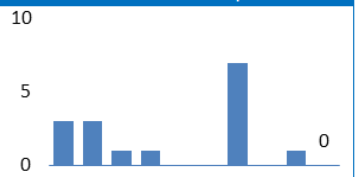
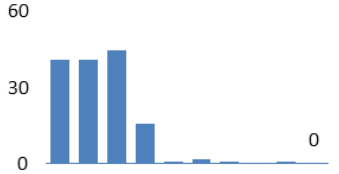
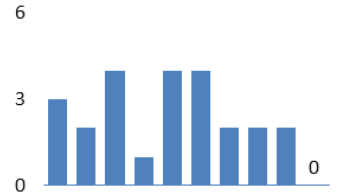
Table 5: Ebola virus disease infections in health-care workers in the three countries with intense transmission

Country	Cases	Deaths
Guinea	186	94
Liberia	372	184
Sierra Leone	303	221*
Total	**861**	**499**

*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

Indicator	Target	26 Jan – 5 Apr
Cases and deaths		
Number of confirmed cases	Zero	
Number of confirmed deaths	Zero	
Number of confirmed deaths that occurred in the community	Zero	
Diagnostic services		26 Jan – 5 Apr
Number of samples tested and the percent of positive EVD results		
Contact tracing		19 Jan – 29 Mar
Percent of new confirmed cases from registered contacts	100%	

Indicator	Target	Aug - Feb
Hospitalization		
Time between symptom onset and hospitalization (days)‡	<2 days	
Outcome of treatment		Aug - Dec
Case fatality rate (among hospitalized cases)#	<40%	
IPC and safety		26 Jan – 5 Apr
Number of newly infected health workers	Zero	
Safe and dignified burials		26 Jan – 5 Apr
Number of reports of unsafe burials	Zero	
Community engagement		26 Jan – 30 Mar
Number of districts with at least one security incident or other form of refusal to cooperate	Zero	

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.

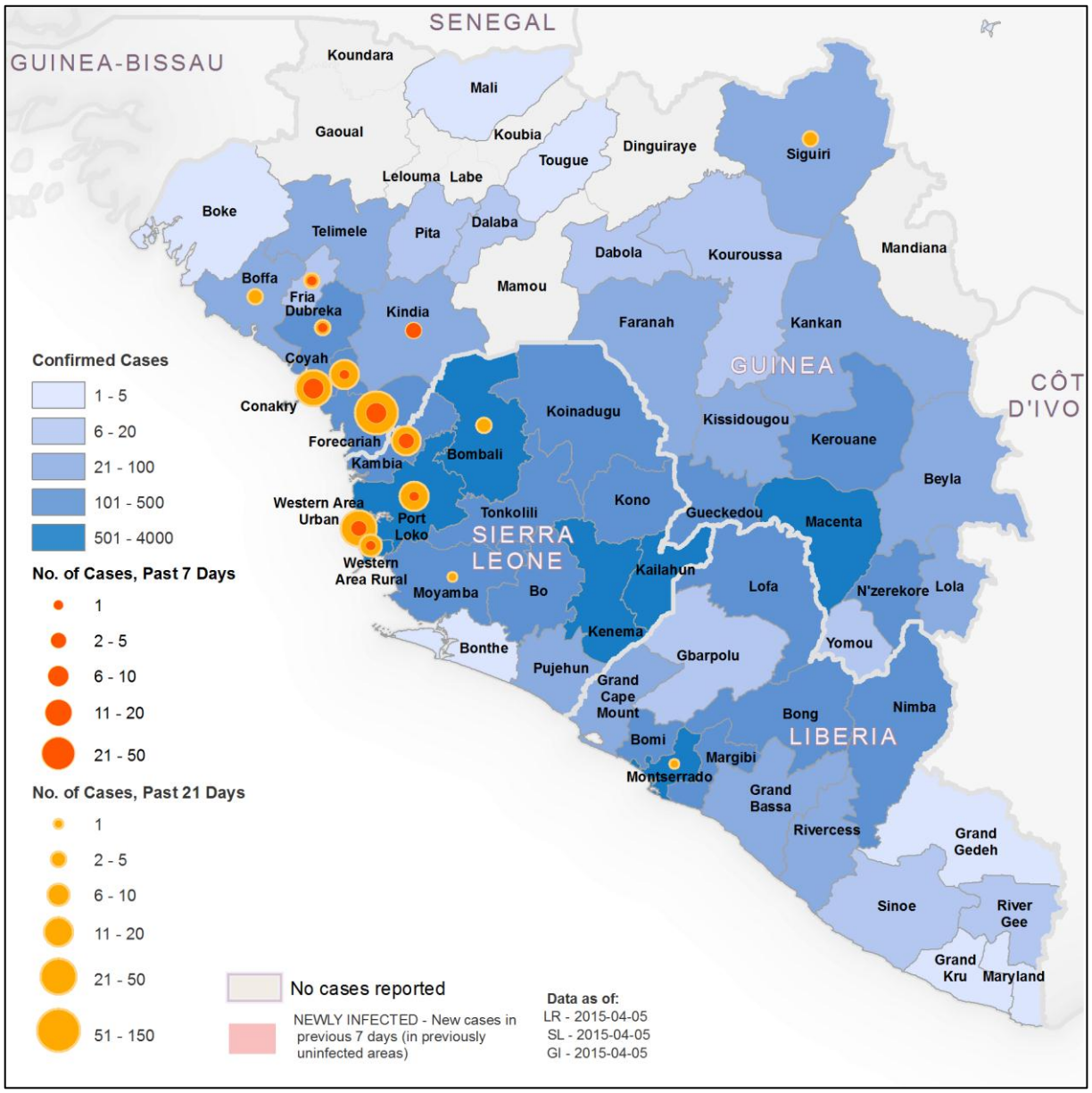
SIERRA LEONE

- Key performance indicators for the EVD response in Sierra Leone are shown in table 6.
- A total of 9 confirmed cases were reported in the week to 5 April, compared with 25 the previous week. This is the fifth consecutive weekly decrease and the lowest weekly total since the third week of May 2014. The country reported zero cases on 3 days over the reporting period.
- Cases were reported from 4 western districts: Kambia (2 cases), Port Loko (1 case), Western Area Rural (1 case), and Western Area Urban (5 cases), which includes the capital, Freetown (figure 2; figure 5; figure 6).
- The absence of any reported unsafe burials over the same period, the low proportion of all EVD-positive deaths (3 of 32: 9%) that were identified in the community after post-mortem testing, and the low proportion of laboratory samples that tested EVD-positive strengthen confidence that the downward trend in case incidence will be continued. However, the proportion of cases that arose among registered contacts fell for the second consecutive week to 56% in the week to 29 March (the most recent week for which data are available), suggesting that challenges remain.
- According to the National Ebola Response Centre, 92% of 580 credible reports of potential EVD cases were investigated within 24 hours in the week to 5 April. Most (81%) alerts come from Bombali (64) and Western

Area (406). Heightened vigilance is being maintained throughout the country: of 1524 new samples tested in the week to 5 April, 1% were EVD-positive. Over 1100 deaths identified in the community were tested for EVD: 3 were EVD-positive.

- Locations of the 16 operational Ebola treatment centres (ETCs) in Sierra Leone are shown in figure 7. Four ETCs closed in the week to 5 April: 1 in the district of Bo, 1 in the capital Freetown, and 2 in Western Rural district, where a specialist maternity facility was opened. There were no new health worker infections reported in the week to 5 April.
- Locations of the 13 operational laboratories in Sierra Leone are shown in figure 8. A total of 81% of samples were tested within 1 day of arrival at a laboratory in the week to 5 April.

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

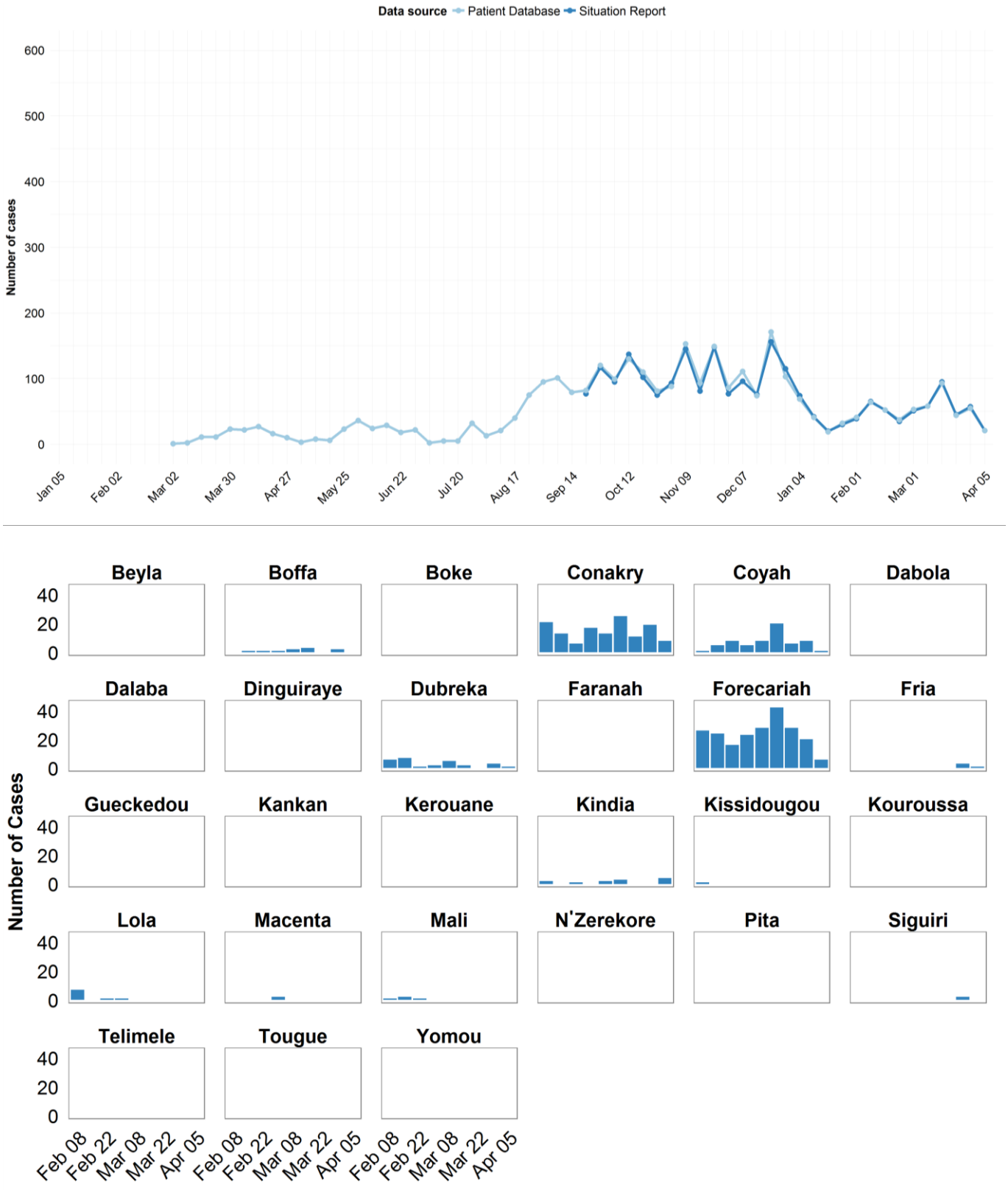
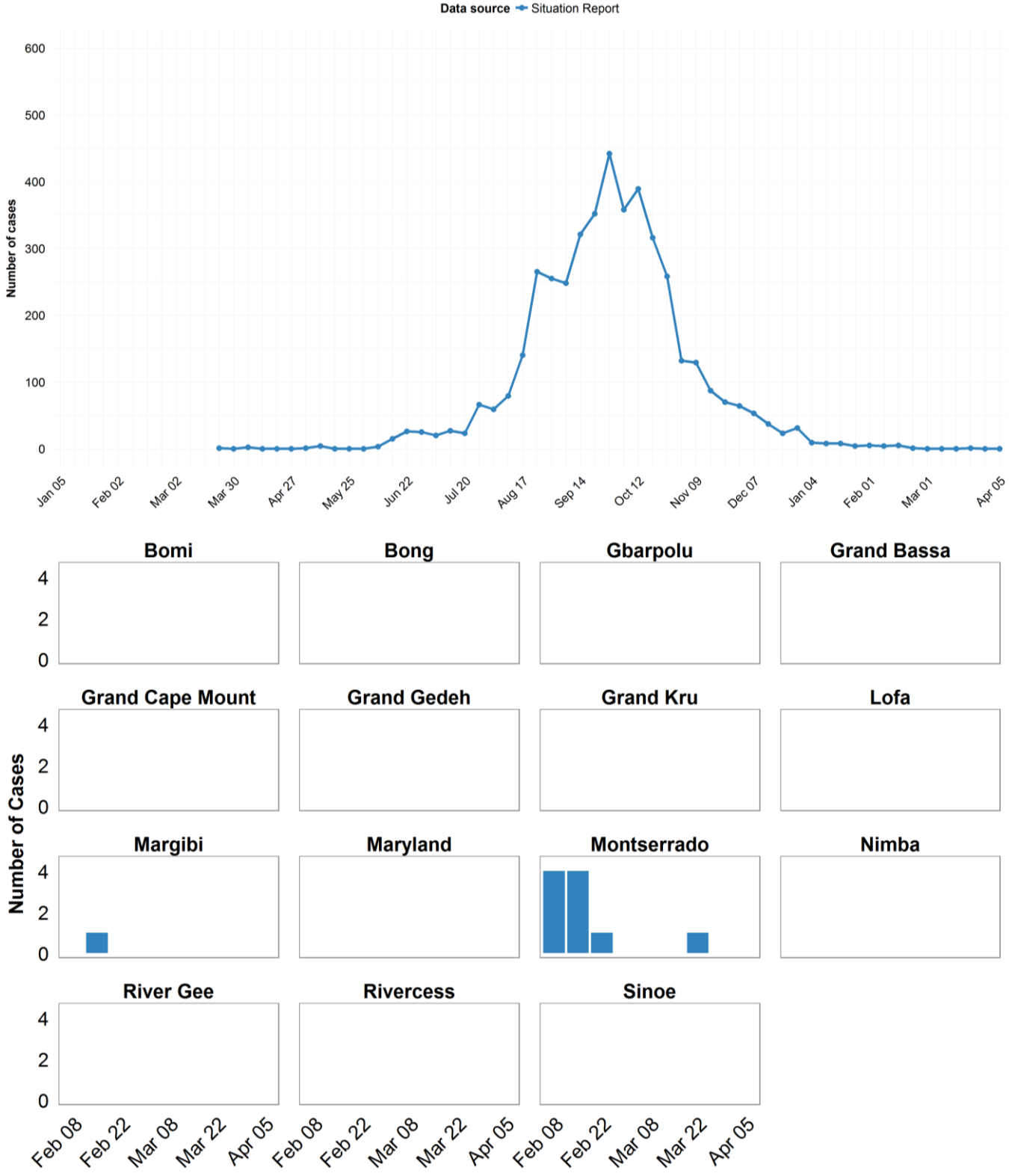


Figure 4: Confirmed weekly Ebola virus disease cases reported nationally and by district from Liberia



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

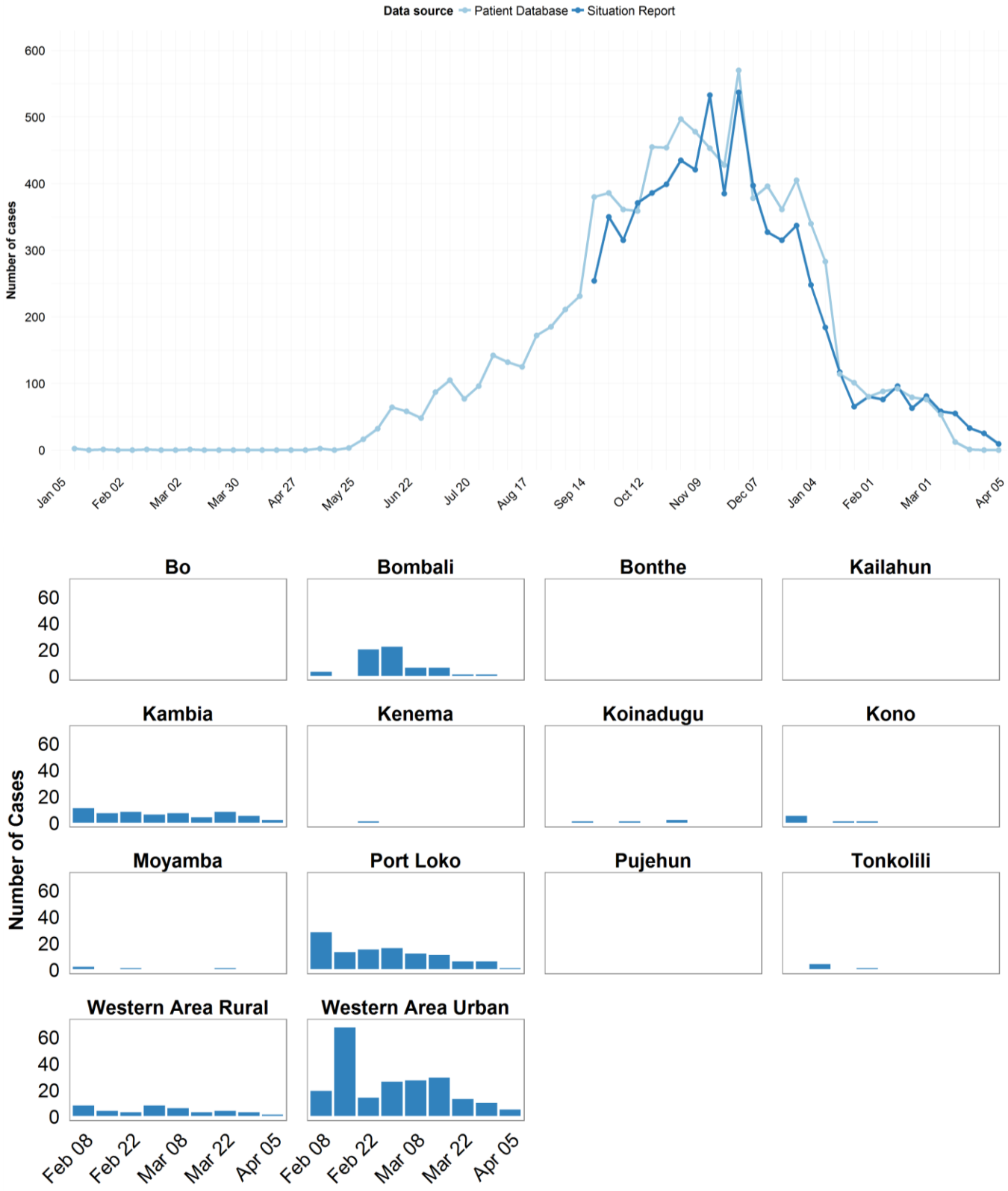
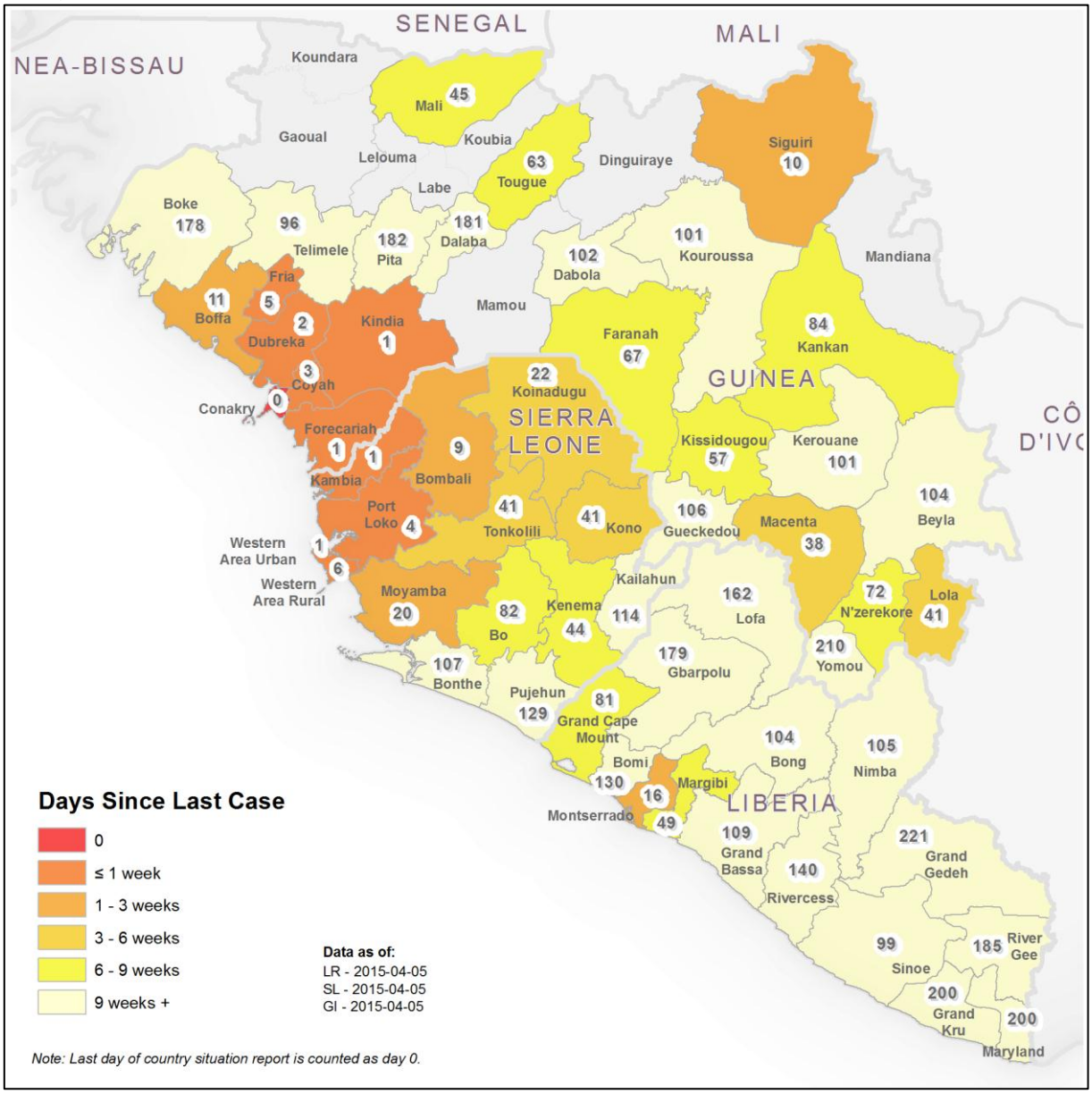


Figure 6: Days since last confirmed case in Guinea, Liberia and Sierra Leone



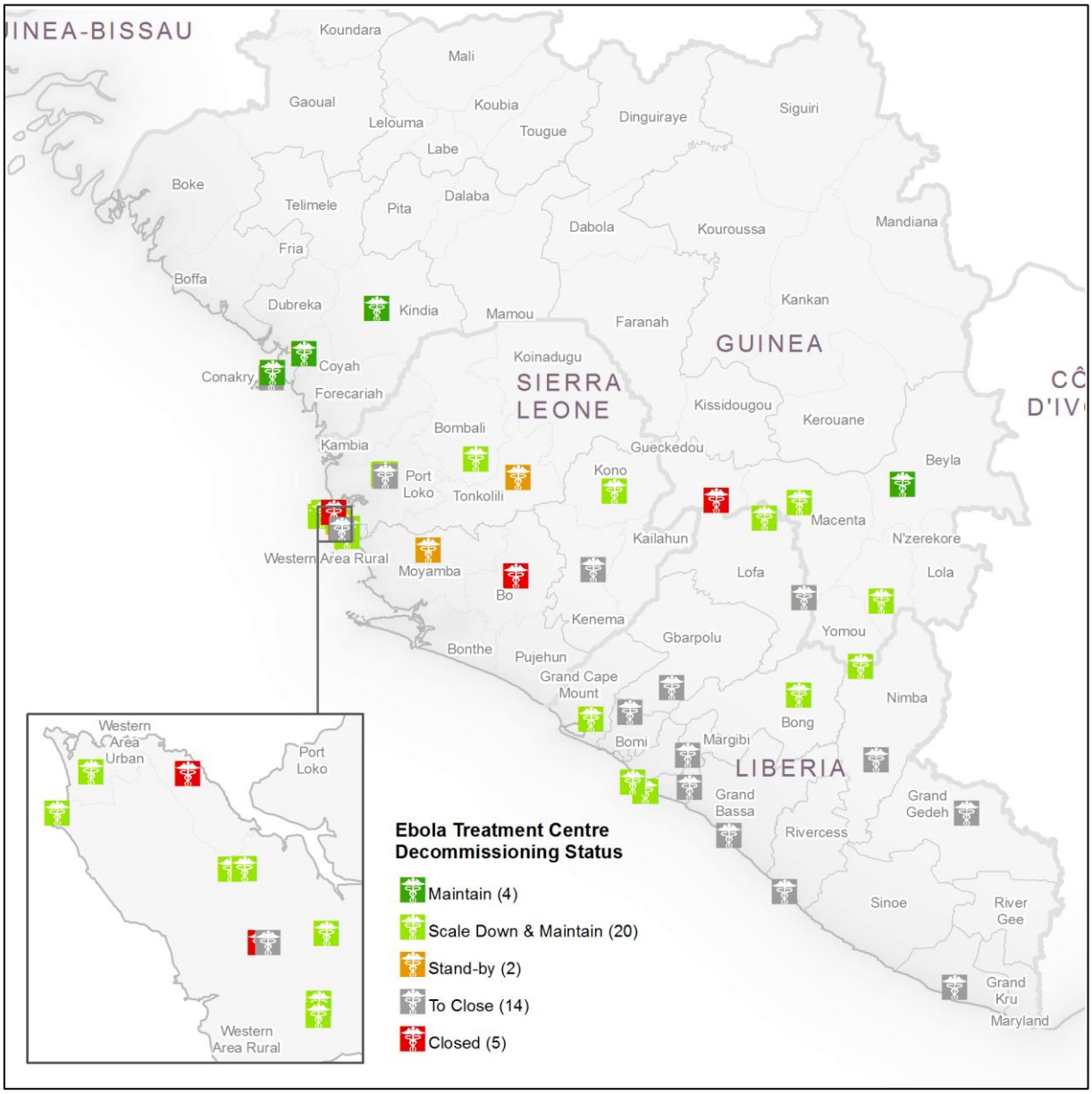
COUNTRIES WITH AN INITIAL CASE OR CASES, OR WITH LOCALIZED TRANSMISSION

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



ETCs scheduled for closure will be decommissioned only when and where the epidemiological situation and the strength of referral pathways through non-EVD facilities allow. Several ETCs will be unstaffed but remain on a stand-by level of readiness, whereby stocks of protective equipment and essential medicines will be kept on-site such that the facility can become operational within 48 hours. This transition would be triggered by higher occupancy rates in nearby ETCs. Strategically located core ETCs will remain fully operational at their current capacity (Maintain) or a slightly reduced capacity (Scale Down and Maintain).

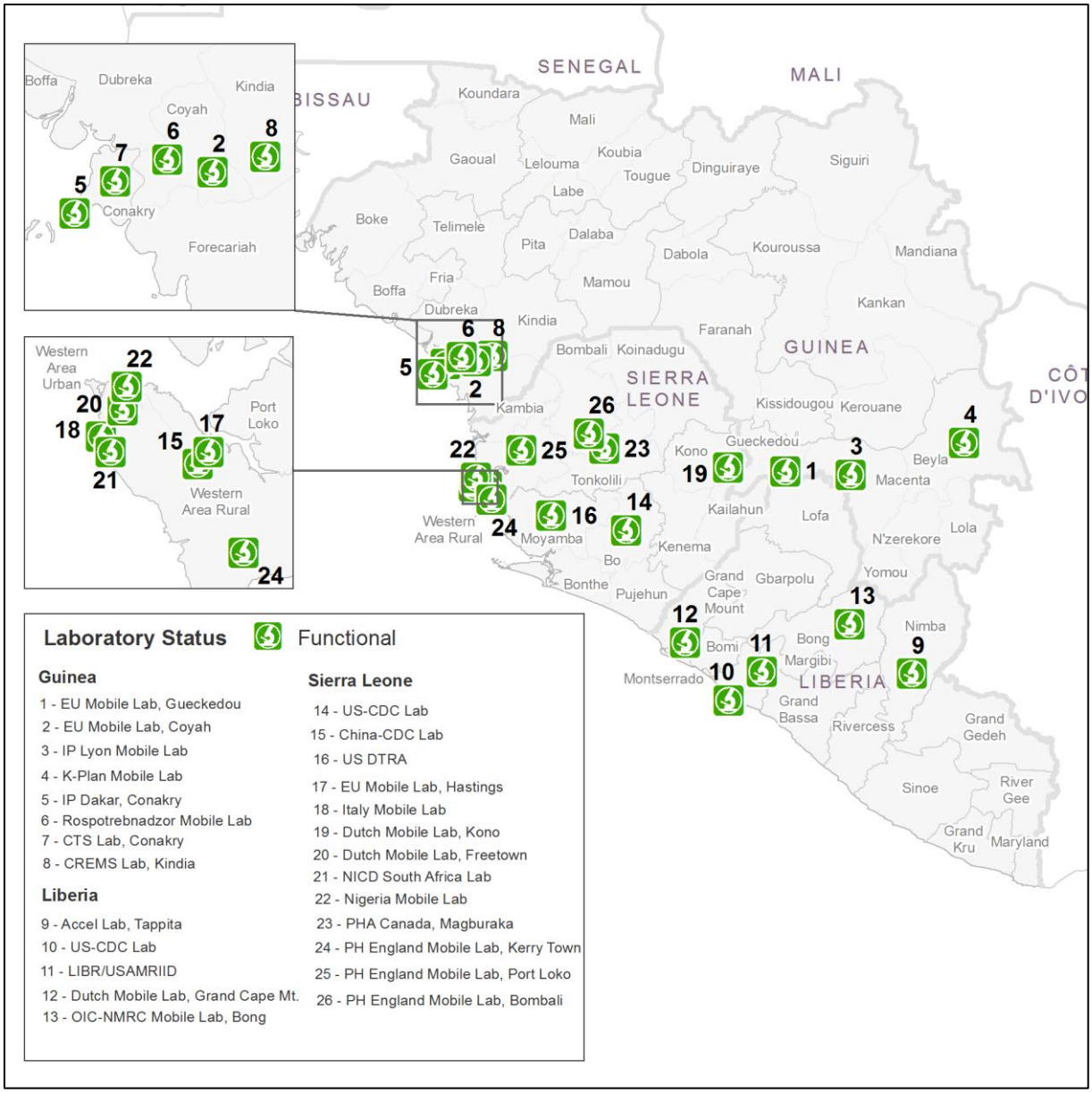
Priority countries in Africa

- 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, and 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;
  - 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.
- 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 10 days to support the development of standard operating procedures for surveillance, 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 was completed on 4 April. The mission reviewed with the Ministry of Health the progress made since the first PST visit in November 2014, in particular in the area of coordination, communication and rapid response. A first assessment of logistical capacities was done and specific technical support provided to rapidly render operational the Ebola Treatment Centre in Ouagadougou. WHO will further support the Ministry of Health to conduct case management training.
- Missions are planned for Cameroon 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 in Bamako, Mali.
- Rapid-response team trainings are planned in the United Arab Emirates, Morocco and Jordan during May.

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 online[3].

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

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 four key lines of action in the response are given below.

Lines of action	Lead agency
Case management	WHO
Case finding, laboratory services, 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: 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
Infection Prevention and 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 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