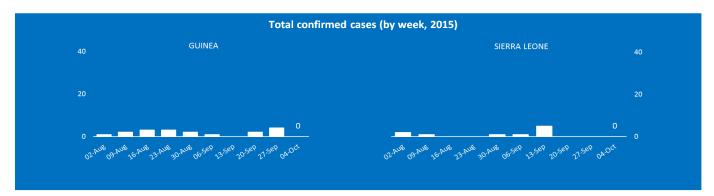


# **EBOLA SITUATION REPORT**

07 OCTOBER 2015



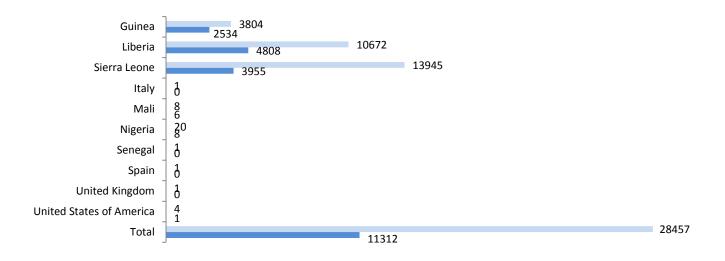
# **SUMMARY**

- No confirmed cases of Ebola virus disease (EVD) were reported in the week to 4 October. This is the first time that a complete epidemiological week has elapsed with zero confirmed cases since March 2014. All contacts have now completed follow-up in Sierra Leone. However, over 500 contacts remain under follow-up in Guinea, and several high-risk contacts associated with active and recently active chains of transmission in Guinea and Sierra Leone have been lost to follow-up. There remains a near-term risk of further cases.
- Case incidence has remained below 10 confirmed cases per week for 11 consecutive weeks. Over the same period, transmission of the virus has been geographically confined to several small areas in western Guinea and Sierra Leone, marking a transition to a distinct, third phase of the epidemic. A refined phase-3 response<sup>1</sup> coordinated by the Interagency Collaboration on Ebola<sup>2</sup> will build on existing measures to drive case incidence to zero, and ensure a sustained end to EVD transmission. Enhanced capacity to rapidly identify a reintroduction (either from an area of active transmission or from an animal reservoir), or re-emergence of virus from a survivor, and capacity for testing and counselling as part of a comprehensive package to safeguard the welfare of survivors are central to the phase-3 response framework.
- A total of 509 contacts remain under follow-up in 3 prefectures in Guinea: Conakry, Coyah, and Forecariah. All contacts are associated with a single chain of transmission centred on the Ratoma area of the capital, Conakry. In addition, approximately 290 contacts have been identified but have so far proven untraceable in the past 42 days in 4 Guinean prefectures: Conakry, Coyah, Dubreka, and Forecariah. The 4 most recent cases in Guinea, which were reported on 26 and 27 September from two villages in the sub-prefecture of Kaliah, Forecariah, were infected by an unregistered contact of a probable case linked to the Ratoma chain of transmission. Several door-to-door case-finding operations were undertaken in the areas of Dixinn and Ratoma in Conakry and in several villages in the sub-prefecture of Kaliah, Forecariah, in the week to 4 October in order to mitigate some of the risk posed by contacts who have not been traced.
- Sierra Leone reported no confirmed cases for the third consecutive week. All contacts linked to the country's two most recently active chains of transmission, Bombali and Kambia, have now completed 21-day follow-up. In addition, the last case to receive treatment was discharged from an Ebola treatment centre in Kambia on 26 September. However, two high-risk contacts—one from Bombali and one from Kambia—remain untraced. Efforts to trace these missing contacts and mitigate the risk of any undetected transmission will continue until at least 42 days have elapsed since the last reported case in each district.
- Robust surveillance measures are essential to ensure the rapid detection of any reintroduction or reemergence of EVD in currently unaffected areas. Eight operational laboratories in Guinea tested a total of 725 samples in the week to 4 October. Analyses of the geographical distribution of samples collected indicate that 20 of 34 Guinean prefectures did not collect any samples from either live or dead suspected cases of EVD over the 1-week period. In Liberia, 928 samples were collected from 100% (15 of 15) of counties and tested in the 4 operational laboratories in the week to 4 October. Over the same period, 1738 samples were collected from 100% (14 of 14) of districts in Sierra Leone and tested by 10 operational laboratories.

<sup>&</sup>lt;sup>1</sup> Ebola response phase 3: Framework for achieving and sustaining a resilient zero: http://www.who.int/csr/resources/publications/ebola/ebola-response-phase3/en/

<sup>&</sup>lt;sup>2</sup> See: http://www.who.int/csr/disease/ebola/situation-reports/ice-reports/en/





## COUNTRIES WITH WIDESPREAD AND INTENSE TRANSMISSION

Country	Case definition	Cumulative cases	Cases in past 21 days	Cumulative deaths	
	Confirmed	3344	6	2081	
	Probable	453	*	453	
Guinea	Suspected	7	*	‡	
	Total	3804	6	2534	
	Confirmed	3151	-	‡	
	Probable	1879	-	‡	
	Suspected	5636	-	‡	
1:6**	Total	10 666	-	4806	
Liberia**	Confirmed	6	0	2	
	Probable	*	*	‡	
	Suspected	<b>‡</b>	*	‡	
	Total	6	0	2	
	Confirmed	8704	0	3589	
Ciarra La arra	Probable	287	*	208	
Sierra Leone	Suspected	4954	*	158	
	Total	13 945	0	3955	
	Confirmed	15 205	6	‡	
Total	Probable	2619	*	‡	
TULAI	Suspected	10 597	*	‡	
	Total	28 421	6	11 297	

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

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. <sup>‡</sup>Data not available. \*\*Cases reported before 9 May 2015 are shaded blue. Due to ongoing surveillance and retrospective validation of cases and deaths, these totals may be subject to revision. Liberia was declared free of Ebola virus transmission in the human population on 3 September 2015, and has now entered a period of heightened surveillance.

- Since the beginning of the outbreak there have been a total of 28 421 reported confirmed, probable, and suspected cases<sup>3</sup> of EVD in Guinea, Liberia, and Sierra Leone (figure 1, table 1) up to 4 October, with 11 297 reported deaths (this total includes reported deaths among probable and suspected cases, although outcomes for many cases are unknown). No new cases were reported in the week to 4 October.
- The total number of confirmed cases is similar in males and females (table 2). Compared with children (people aged 14 years and under), adults aged 15 to 44 years of age are approximately four times more likely to be affected in Guinea and Liberia, and three times more likely to be affected in Sierra Leone. Adults aged 45 years and above are approximately five times more likely to be affected in Guinea, and approximately four times more likely in Liberia and Sierra Leone.
- No new health worker infections were reported in the week to 4 October. Since the start of the outbreak a total of 881 confirmed health worker infections have been reported in Guinea, Liberia, and Sierra Leone; there have been 513 reported deaths (table 5).

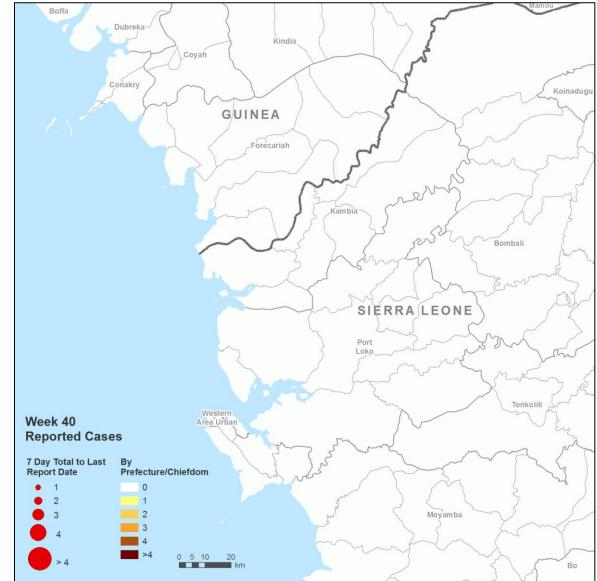


Figure 2: Geographical distribution of confirmed cases reported in the week to 4 October 2015

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.

<sup>&</sup>lt;sup>3</sup>Case definition recommendations for Ebola or Marburg Virus Diseases: <u>http://www.who.int/csr/resources/publications/ebola/ebola-case-definition-contact-en.pdf?ua=1</u>

Cumulative cases									
Country		by sex <sup>*</sup> 100 population)	By age group‡ (per 100 000 population)						
	Male	Female	0–14 years	15–44 years	45+ years				
Guinas	1596	1743	532	1902	861				
Guinea	(29)	(32)	(11)	(41)	(55)				
Liberia <sup>§</sup>	1911	1838	561	2060	703				
Liberia	(96)	(93)	(33)	(121)	(132)				
	4823	5118	1992	5636	2140				
Sierra Leone	(169)	(176)	(82)	(218)	(290)				

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

Population figures are based on estimates from the United Nations Department of Economic and Social Affairs.<sup>4</sup> These numbers are subject to change due to ongoing reclassification, retrospective investigation and availability of laboratory results. \*Excludes cases for which data on sex are not available. ‡Excludes cases for which data on age are not available. <sup>§</sup>Data are until 9 May 2015.

Table 3: Cases and contacts b	v district/prefecture	over the past 3 weeks
Table 5. cases and contacts b	y uistrict/prefecture	over the past 5 weeks

	Prefecture/ District	We	eek	28 Sept	29 Sept	30 Sept	01 Oct	02 Oct	03 Oct	04 Oct	Week 40	Contacts under
		38	39								40	follow up*
	Conakry	2	0	0	0	0	0	0	0	0	0	114
Guinea	Coyah	0	0	0	0	0	0	0	0	0	0	2
	Forecariah	0	4	0	0	0	0	0	0	0	0	393
Subtotal	-	2	4	0	0	0	0	0	0	0	0	509
Sierra	Bombali	0	0	0	0	0	0	0	0	0	0	0
Leone	Kambia	0	0	0	0	0	0	0	0	0	0	0
Subtotal		0	0	0	0	0	0	0	0	0	0	0
Total		2	4	0	0	0	0	0	0	0	0	509

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. \*Data as of 4 October 2015 for Guinea and Sierra Leone.

# **GUINEA**

- Key performance indicators for the EVD response in Guinea are shown in table 6.
- No new confirmed cases were reported from Guinea during the week ending 4 October (table 3, table 4, figure 2, figure 3).
- A total of 509 contacts remain under follow-up in 3 prefectures in Guinea: Conakry, Coyah, and Forecariah (table 3). All contacts are associated with a single chain of transmission centred on the Ratoma area of the capital, Conakry. In addition, approximately 290 contacts have been identified but have not been traceable in the past 42 days in 4 Guinean prefectures: Conakry, Coyah, Dubreka, and Forecariah. The 4 most recent cases in Guinea, which were reported on 26 and 27 September from 2 villages in the sub-prefecture of Kaliah, Forecariah, were infected by an unregistered contact of a probable case linked to the Ratoma chain of transmission.
- Several door-to-door case-finding operations were undertaken in the areas of Dixinn and Ratoma in Conakry
  and in several villages in the sub-prefecture of Kaliah, Forecariah, in the week to 4 October in order to mitigate
  some of the risk posed by contacts who have been lost to follow-up.
- The Ebola ça suffit! ring vaccination trial is continuing in Guinea. All rings comprised of contacts and contacts of contacts associated with confirmed cases now receive immediate vaccination with the rVSV-ZEBOV Ebola vaccine. Previously, rings were randomly allocated to receive either immediate vaccination or vaccination 21 days after the confirmation of a case. On 1 September, the eligibility criteria for the trial were amended to allow the vaccination of children aged 6 years and above.

<sup>&</sup>lt;sup>4</sup> United Nations Department of Economic and Social Affairs: <u>http://esa.un.org/unpd/wpp/Excel-Data/population.htm</u>

- There was 1 (0.2%) unsafe burial reported in Guinea out of 494 reported community deaths during the week to 4 October, compared with 1 (0.2%) unsafe burials out of 521 reported community deaths during the previous week.
- Including both initial and repeat testing, a total of 725 laboratory samples were tested in the week to 4 October. Most tests (79% in the week to 4 October) are of post-mortem swabs taken to rule out EVD as the cause of death (figure 7, figure 8). Analyses of the geographical distribution of samples tested indicate that no samples from live or dead suspected cases of EVD were tested from over half (20 of 34) of Guinean prefectures during the week to 4 October (figure 7, figure 8). Most of the 20 prefectures with zero samples tested are located in the north and east of the country. Locations of the 8 operational laboratories in Guinea are shown in figure 8.
- Locations of the 8 operational Ebola treatment centres (ETCs) are shown in figure 6. No health worker infections were reported in the week to 4 October.

		Cult	Week 38	Week 39	Week 40 (28 September - 4 October 2015)					
Country	Prefecture/ District	Sub- prefecture/ Chiefdom	(14 - 20 Sept 2015)	(21 - 27 Sept 2015)	Cases	On contact list	Epi- link*	Unknown source of infection <sup>‡</sup>	Confirmed community death <sup>§</sup>	Date of last confirmed case
	Ratoma	1	0						16/09/2015	
Guinea	Guinea	Dixinn	1	0						19/09/2015
Forecariah	Kaliah	0	4						27/09/2015	
Subtotal			2	4	0	0	0	0	0	
Sierra	Bombali	Bombali Sebora	0	0						13/09/2015
Leone	Kambia	Tonko Limba	0	0						09/09/2015
Subtotal			0	0	0	0	0	0	0	
All			2	4	0	0	0	0	0	

#### Table 4: Location and epidemiological status of confirmed cases reported in the 3 weeks to 4 October 2015

Sub-prefectures/chiefdoms that reported one or more confirmed cases in the 7 days to 4 October are highlighted. \*Epi-link refers to cases who were not registered as contacts of a previous case (possibly because they refused to cooperate or were untraceable), but who, after further epidemiological investigation, were found to have had contact with a previous case, OR refers to cases who are resident or are from a community with active transmission in the past 21 days. <sup>‡</sup>Includes cases under epidemiological investigation. <sup>§</sup>A case that is identified as a community death can also be registered as a contact, or subsequently be found to have had contact with a known case (epi-link), or have no known link to a previous case.

# **SIERRA LEONE**

- Key performance indicators for the EVD response in Sierra Leone are shown in table 7.
- No new confirmed cases were reported from Sierra Leone in the week to 4 October. This is the third consecutive week that the country has recorded zero cases.
- All contacts linked to the country's two most recently active chains of transmission, Bombali and Kambia, completed 21-day follow-up as of 4 October (the last case reported in Bombali was isolated on 12 September, before being reported as a case on 13 September). In addition, the last case to receive treatment was discharged from an Ebola treatment centre in Kambia on 26 September. However, two high-risk contacts—one from Bombali and one from Kambia—remain untraced. Efforts to trace these missing contacts and mitigate the risk of any undetected transmission will continue until at least 42 days have elapsed since the last reported case in each district.
- The *Ebola ça suffit!* ring vaccination Phase 3 efficacy trial of the rVSV-ZEBOV vaccine has now been extended from Guinea to Sierra Leone. Contacts and contacts of contacts associated with new confirmed cases and who meet the trial's eligibility criteria will therefore be offered the vaccine.
- Locations of the 10 operational Ebola treatment centres (ETCs) in Sierra Leone are shown in figure 6. No health
  worker infections were reported in the week to 4 October.
- Laboratory indicators continue to reflect a heightened degree of vigilance, with 1738 new samples from all 14 Sierra Leonean districts tested in the week to 4 October (figure 7, figure 8). Most tests (80% in the week to 4 October) are of post-mortem swabs taken to rule out EVD as the cause of death (figure 7, figure 8).

- In the week to 4 October there were 274 alerts of people who showed any symptom compatible with EVD, all
  of which were responded to within the same day. During the same period, there were 1473 notifications of
  burials, of which 1455 (99%) were responded to within the same day.
- Locations of the 10 operational laboratories in Sierra Leone are shown in figures 7 and 8.

# Table 5: Ebola virus disease infections in health workers in Guinea, Liberia, and Sierra Leone

Country	Cases	Deaths
Guinea	196	100
Liberia*	378	192
Sierra Leone	307	221 <sup>‡</sup>
Total	881	513

Data are confirmed cases and deaths only, apart from deaths in Sierra Leone, which include confirmed, probable, and suspected deaths. \*Data are until 9 May 2015. <sup>‡</sup>Data as of 17 February 2015.

#### Table 6: Key response performance indicators for Guinea

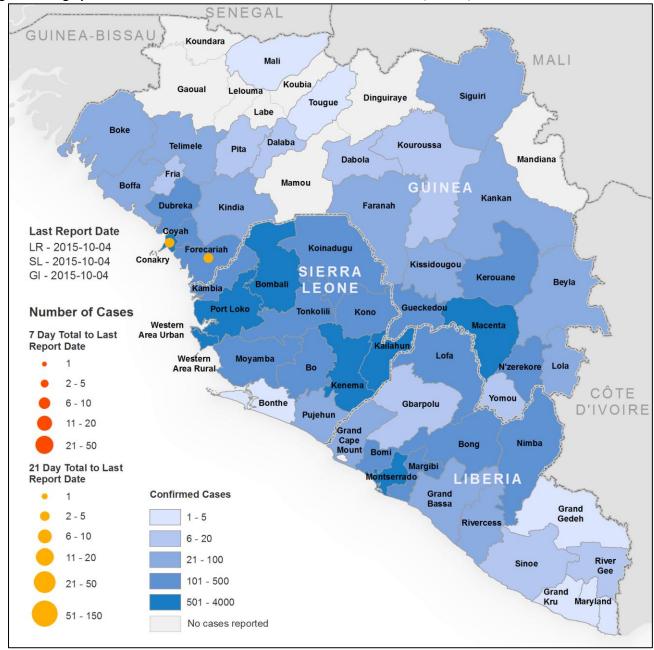
	Target			Indicator	Target	
Cases and deaths	5		27 July – 4 October	Hospitalization		Sept - Aug
Number of confirmed cases	Zero	30 15 0 -	0	Time between symptom onset and hospitalization (days) <sup>‡</sup>	<2 days	5.0 2.5 0.0
		30		Outcome of trea	tment	Sept - July
Number of	Zero	15		Case fatality rate (among		50%
confirmed deaths		0 -	1	hospitalized cases)#	<40%	30%
		600	494	IPC and safety		27 July – 4 October
Proportion of EVD-positive reported commmunity deaths	Zero	300	0%	Number of newly infected health workers	Zero	4 2 0
Diagnostic servic	es		27 July – 4 October	Safe and dignifie	d burials	<b>s</b> 27 July – 4 October
Number of samples tested and the percent of positive EVD results*		1000 500 0	725	Number of unsafe burials and the reported number of community deaths	Zero	600 494 300 1
Contact tracing			27 July – 4 October	Community eng	agement	27 July – 4 October
Percent of new confirmed cases from registered contacts	100%	100% 50% 0%	N/A	Number of prefectures with a least one security incident or other form of refusal to cooperate	t Zero	

For definitions of key performance indicators see Annex 2. Data are given for 7-day periods. \*Includes repeat samples. <sup>‡</sup>Data missing for 0–3% of cases. <sup>#</sup>Outcome data missing for 0–3% of hospitalized confirmed cases.



Indicator	Target	t			Indicator	Target	
Cases and deaths	;		27 July – 4 October		Hospitalization		Sept - July
Number of confirmed cases	Zero	20 10 0	<b>.</b>	0	Time between symptom onset and hospitalization (days) <sup>‡</sup>	<2 days	
		20			Outcome of treat	nent	Aug - May
Number of confirmed deaths	Zero	10 0 —		0	Case fatality rate (among hospitalized cases)#	<40%	80% 50% 20%
		1700		1417	IPC and safety		27 July – 4 October
Proportion of EVD-positive reported commmunity deaths	Zero	850		0%	Number of newly infected health workers	Zero	1 0.5 00
Diagnostic service	es		27 July – 4 October		Safe and dignified	burials	27 July – 4 October
Number of samples tested and the percent of positive EVD results		2000 1000 0		1738 0%	Number of reports of unsafe burials <sup>§</sup>	Zero	4 4
Contact tracing			27 July – 4 October		Community engag	gement	15 July – 16 September
Percent of new confirmed cases from registered contacts	100%	100% 50% 0%		N/A	Number of districts with at least one security incident or other form of refusal to cooperate	Zero	

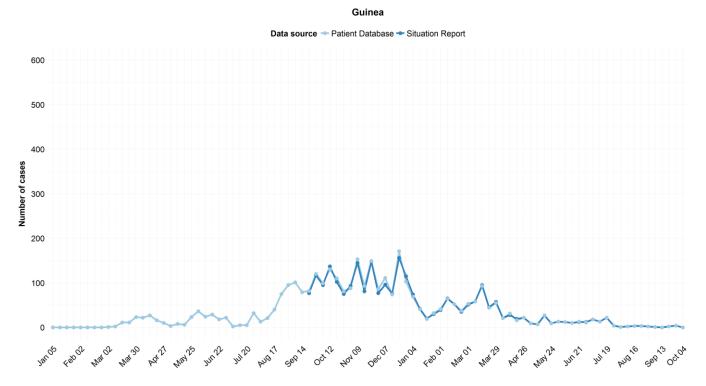
For definitions of key performance indicators see Annex 2. Data are for 7-day periods. <sup>§</sup>Two suspected and two confirmed unsafe burials occurred in Western Area in the week to 4 October. <sup>‡</sup>Data missing for 7–14% of cases. <sup>#</sup>Outcome data missing for 0–77% of hospitalized, confirmed cases.

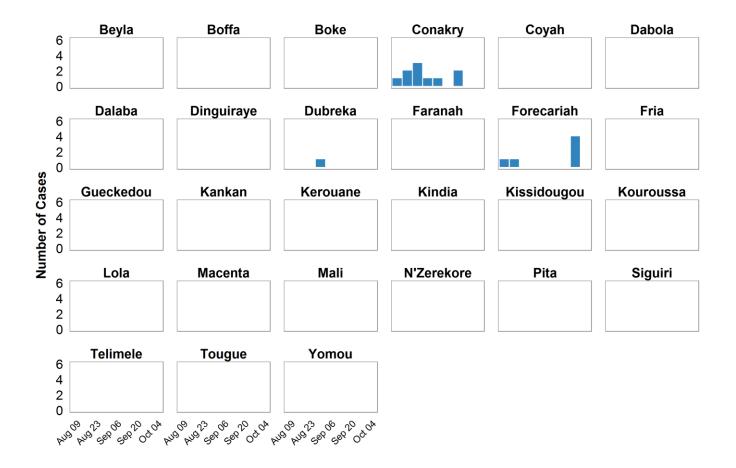


#### Figure 3: Geographical distribution of new and total confirmed cases in Guinea, Liberia, and Sierra Leone

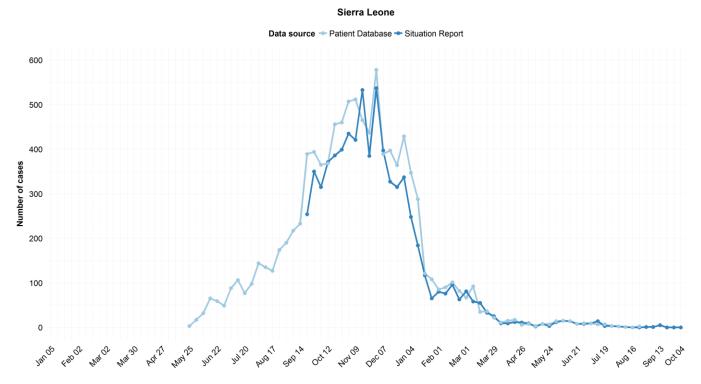
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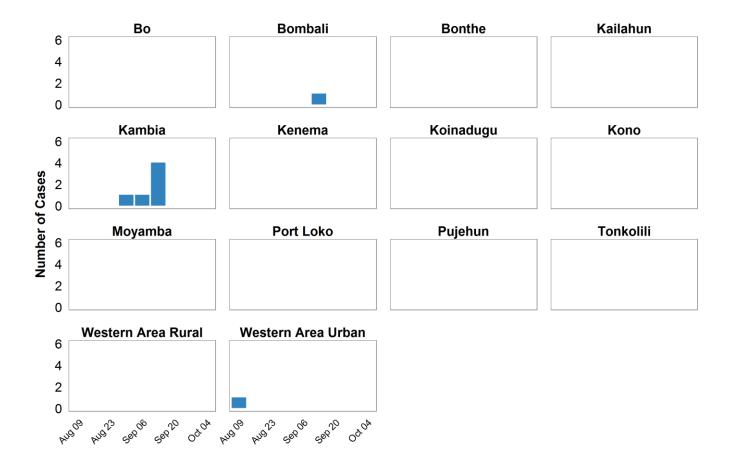
#### Figure 4: Confirmed weekly Ebola virus disease cases reported nationally and by prefecture from Guinea

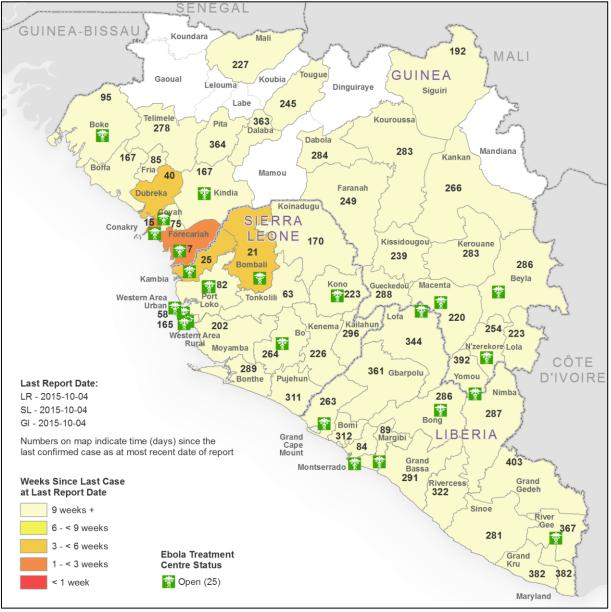




## Figure 5: Confirmed weekly Ebola virus disease cases reported nationally and by district from Sierra Leone







#### Figure 6: Location of Ebola treatment centres and time since last confirmed case in Guinea, Liberia, and Sierra Leone

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# **OTHER AFFECTED AND PREVIOUSLY AFFECTED COUNTRIES**

- Liberia was declared free of Ebola virus transmission in the human population on 3 September 2015, 42 days after the country's last laboratory-confirmed case completed treatment and was confirmed as EVD-negative. It is now 85 days since symptom onset of the last reported confirmed case (figure 6). The country has now entered a 90-day period of heightened surveillance. 928 samples were collected from all of the country's 15 counties in the week to 4 October and tested in the country's 4 operational laboratories. 81% of samples were blood samples taken from live suspect cases in the week to 4 October.
- Seven countries (Italy, 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.

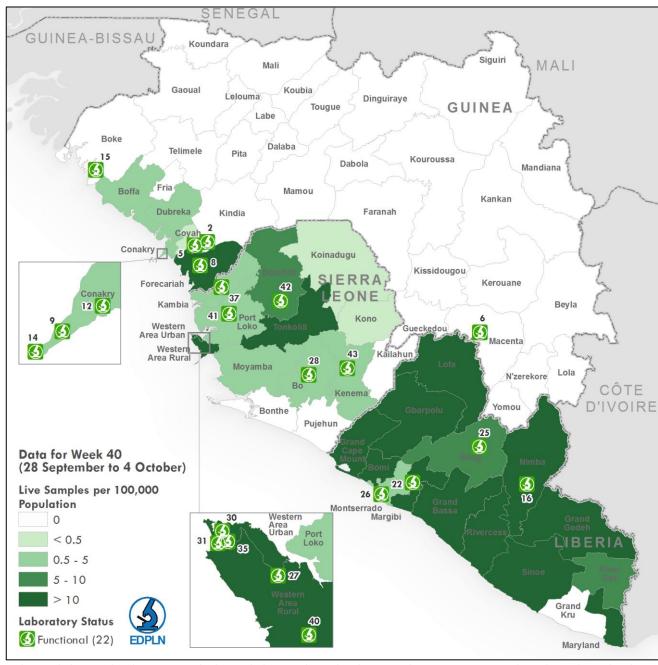


Figure 7: Location of laboratories and geographical distribution of samples from live patients in Guinea, Liberia, and Sierra Leone in the week to 4 October 2015

The analysis includes initial and repeat samples but excludes samples with unknown and incorrect testing weeks and samples with unknown or incorrect location information. EDPLN=Emerging and Dangerous Pathogens Laboratory Network. 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. 2=CREMS Lab – Kindia; 5=EU Mobile Lab – Coyah; 6=IP France – Macenta; 8=K-Plan Mobile Lab – Forecariah; 9=IP Dakar – Conakry; 12=REDC Lab – Conakry; 14=K-Plan Mobile Lab – Conakry; 15=Boke Mobile Lab; 16=Tappita Lab – Nimba; 22=LIBR National Reference Lab/USAMRIID; 25=OIC-NMRC Mobile Lab Bong; 26=MOH Lab – Montserrado; 27=US-CDC Lab – Bo; 28=China-CDC Lab – Jui; 30=CPHRL/DTRA – Lakka; 31=EMDF/NICD – Lakka; 35=MOH/Emergency – PCMH/Freetown; 37=Nigeria Mobile Lab – Kambia; 40=PH England Mobile Lab – Kerry Town; 41=PH England Mobile Lab – Port Loko; 42=PH England Mobile Lab – Makeni; 43=PH England Mobile Lab – Kenema.

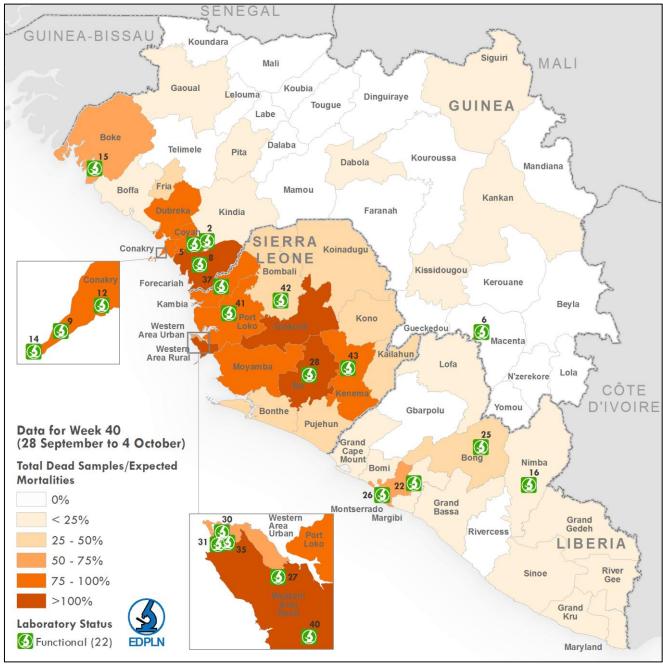


Figure 8: Location of laboratories and geographical distribution of samples from dead bodies in Guinea, Liberia, and Sierra Leone in the week to 4 October 2015

The analysis includes initial and repeat samples but excludes samples with unknown and incorrect testing weeks and samples with unknown or incorrect location information. EDPLN=Emerging and Dangerous Pathogens Laboratory Network. 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. 2=CREMS Lab – Kindia; 5=EU Mobile Lab – Coyah; 6=IP France – Macenta; 8=K-Plan Mobile Lab – Forecariah; 9=IP Dakar – Conakry; 12=REDC Lab – Conakry; 14=K-Plan Mobile Lab – Conakry; 15=Boke Mobile Lab; 16=Tappita Lab – Nimba; 22=LIBR National Reference Lab/USAMRIID; 25=OIC-NMRC Mobile Lab Bong; 26=MOH Lab – Montserrado; 27=US-CDC Lab – Bo; 28=China-CDC Lab – Jui; 30=CPHRL/DTRA – Lakka; 31=EMDF/NICD – Lakka; 35=MOH/Emergency – PCMH/Freetown; 37=Nigeria Mobile Lab – Kambia; 40=PH England Mobile Lab – Kerry Town; 41=PH England Mobile Lab – Port Loko; 42=PH England Mobile Lab – Makeni; 43=PH England Mobile Lab – Kenema.

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

- The introduction of an EVD case into unaffected countries remains a risk as long as cases exist in any country. With adequate preparation, however, such an introduction can be contained through a timely and effective 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 support visits by preparedness-strengthening teams (PSTs) to help identify and prioritize gaps and needs, direct technical assistance, and provide technical guidance and tools.

#### **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—Benin, Burkina Faso, Cameroon, Central African Republic, Democratic Republic of the Congo, Ethiopia, Gambia, Ghana, Mauritania, Niger, Nigeria, South Sudan, and Togo. The criteria used to prioritize countries include the geographical proximity to affected countries, the magnitude of trade and migration links, and the relative strength of their health systems.
- Since 20 October 2014, PSTs have provided technical support in Benin, Burkina Faso, Cameroon, Central African Republic, Côte d'Ivoire, Ethiopia, Gambia, Ghana, Guinea-Bissau, Mali, Mauritania, Niger, Senegal, South Sudan, and Togo. Technical working group meetings, field visits, high-level table-top exercises, and field simulations have helped to identify key areas for improvement. Each country has a tailored plan to strengthen operational readiness.
- From October 2014 to October 2015, WHO has undertaken over 290 field deployments to priority countries to assist with the implementation of national plans.
- WHO provides personal protective equipment (PPE) modules containing minimum stocks to cover staff protection and other equipment needs to support 10 patient-beds for 10 days for all staff with essential functions. PPE modules have been delivered or are in the process of being delivered to all countries on the African continent. In addition, all countries have received a PPE training module.
- Contingency stockpiles of PPE are in place in the United Nations Humanitarian Response Depots (UNHRD) in Accra and Dubai, and are available to any country in the event that they experience a shortage.

### Follow-up support to priority countries

- Following initial PST assessment missions to the 14 priority countries in 2014, a second phase of preparednessstrengthening activities have provided support on a country-by-country basis. Activities in the week to 7 October are highlighted below.
- International Health Regulation (IHR) training on screening at points of entry was provided for over 30 participants in Mauritania from 28 September to 2 October. The training was supported by the WHO Country Office and the country's ministry of health. A further mission to plan several exercises taking place between 5 and 14 October.
- Experts in Infection prevention and control (IPC) have deployed to Togo from 30 September to 9 October to assist with the revision of the country's national IPC policy and plan.
- A workshop will take place in Niger between 5 and 10 October to develop and adopt standard operating procedures for logistics. An assessment of national logistical and operational capacity will also be undertaken.
- A mission to plan and implement a functional exercise will deploy to Ghana from 5 to 18 October. The exercise
  will test the performance of the Incident Management System of the Ministry of Health Emergency Operations
  Centre, coordination of partner organizations, and the effectiveness of rapid-response teams.
- In Guinea-Bissau, preparedness support continues to be provided at the central level, and in two priority
  regions (Tombali and Gabu) through WHO sub-offices. In regional health centres, training was provided on the
  correct use of infrared thermometers. A cross-border meeting with Guinea was held to support efforts to map
  all official and unofficial border crossings.

# **EVD preparedness officers**

Dedicated EVD preparedness officers have been deployed to support the implementation of country preparedness plans, coordinate partners, provide a focal point for inter-agency collaboration, offer specific technical support in their respective areas of expertise, and develop capacity of national WHO staff. Preparedness officers are currently deployed to Benin, Burkina Faso, Cameroon, Central African Republic, Côte d'Ivoire, Ethiopia, Gambia, Ghana, Guinea-Bissau, Mali, Mauritania, Niger, Senegal, and Togo.

# Training, exercises, and simulations

- Priority countries that have achieved a minimum of 50% implementation of preparedness checklist activities are encouraged to undertake a series of drills on elements of an EVD response and a functional exercise to test the coordination of the Ebola operations centre.
- Simulation exercises aimed at testing preparedness capabilities are being planned in Benin, Burkina Faso, Ethiopia, Ghana, Guinea-Bissau, Mauritania, Niger and Togo and will start in the coming weeks or months.

# 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 that share a border with affected countries: Côte d'Ivoire, Guinea-Bissau, Mali, and Senegal.
- An interactive preparedness dashboard based on the WHO EVD checklist<sup>5</sup> is available online.

# **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, UN agencies, and technical institutions and networks in the Global Outbreak Alert and Response Network (GOARN). 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, 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

<sup>&</sup>lt;sup>5</sup> See: http://who.int/csr/resources/publications/ebola/ebola-preparedness-checklist/en/

<sup>&</sup>lt;sup>4</sup> See: http://apps.who.int/ebola/preparedness/map

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

Indicator	Numerator	IANCE INDICATORS FOR PHASI Numerator source	Denominator	Denominator source
Cases and deaths				
Number of confirmed cases	# of confirmed cases	Guinea: Daily WHO situation reports 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 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 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 Sierra Leone: Daily Ministry of Health Ebola situation reports	N/A # of new samples tested	Guinea: Laboratory database 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 Sierra Leone: Weekly Ministry of Health Surveillance Report	# of new confirmed cases	Guinea: Daily WHO situation reports 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
<b>Infection Prevention a</b>	nd Control (IPC) and Safety			
Number of newly infected health workers	# of newly infected health workers	Guinea: Daily WHO situation reports Sierra Leone: Daily Ministry of Health Ebola situation Reports	N/A	N/A
Safe and dignified buri				
Number of unsafe burials reported	# of reports/alerts of burials that were not known to be safe	Guinea: Daily WHO situation reports 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 Sierra Leone: UNICEF	N/A	N/A