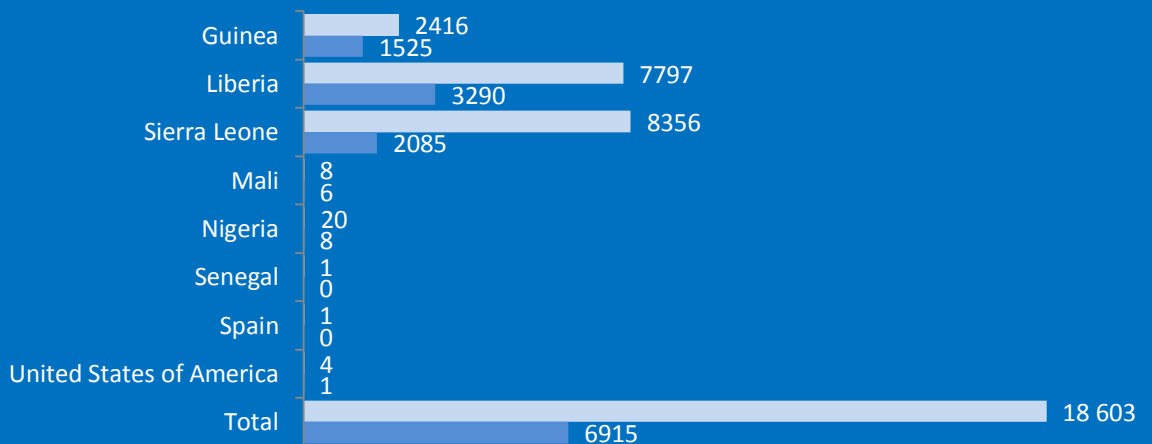




HIGHLIGHTS

- There have been 18 603 reported cases of Ebola virus disease, with 6915 reported deaths.
- Reported case incidence is fluctuating in Guinea and decreasing in Liberia.
- There are signs that the increase in incidence has slowed in Sierra Leone. A major operation has been implemented to curb the spread of disease in the west of the country.
- No new cases have been reported in Mali since 24 November. All contacts of the outbreak in Bamako have completed the 21-day follow-up period.

CASES/  
DEATHS



SUMMARY

A total of 18 603 confirmed, probable, and suspected cases of Ebola virus disease (EVD) have been reported in five affected countries (Guinea, Liberia, Mali, Sierra Leone, and the United States of America) and three previously affected countries (Nigeria, Senegal and Spain) in the seven days to 14 December (week 50). There have been 6915 reported deaths (case definitions are provided in Annex 1).

Reported case incidence is fluctuating in Guinea and declining in Liberia. In Sierra Leone, there are signs the increase in incidence has slowed, and that incidence may no longer be increasing. The case fatality rate in the three intense-transmission countries among all cases for whom a definitive outcome is recorded is 70%. For those patients recorded as hospitalized, the case fatality rate is 60% in each of Guinea and Sierra Leone, and 58% in Liberia.

Interventions in the three most-affected countries continue to progress in line with the UN Mission for Ebola Emergency Response aim to isolate and treat 100% of EVD cases and bury safely and with dignity 100% of EVD-related fatal cases by 1 January, 2015. At a national level, there is now sufficient bed capacity in EVD treatment facilities to treat and isolate all reported EVD cases in each of the three countries, although the uneven distribution of beds and cases means serious shortfalls persist in some districts. At a national level, each country has sufficient capacity to bury all people known to have died from Ebola, although it is possible that in some areas capacity remains inadequate. Every district that has reported a case of EVD in the three intense-transmission countries has access to a laboratory within 24 hours from sample collection. All three countries report that more than 80% of registered contacts associated with known cases of EVD are being traced. Social mobilization continues to be an important component of the response to curb the spread of disease. Community engagement promotes burial practices that are safe and culturally acceptable, and the isolation and appropriate treatment of patients with clinical symptoms of EVD.

## OUTLINE

This situation report on the Ebola Response Roadmap<sup>1</sup> contains a review of the epidemiological situation based on official information reported by ministries of health, and an assessment of the response measured against the core Roadmap indicators where available. Substantial efforts are ongoing to improve the availability and quality of information about both the epidemiological situation and the implementation of response measures.

Following the Roadmap structure, country reports fall into three categories: (1) those with widespread and intense transmission (Guinea, Liberia and Sierra Leone); (2) those with or that have had an initial case or cases, or with localized transmission (Mali, Nigeria, Senegal, Spain and the United States of America); and (3) those countries that neighbour or have strong trade ties with areas of active transmission.

### 1. COUNTRIES WITH WIDESPREAD AND INTENSE TRANSMISSION

A total of 18 569 confirmed, probable, and suspected cases of EVD and 6900 deaths have been reported up to the end of 14 December 2014 by the Ministries of Health of Guinea and Sierra Leone, and 9 December by the Ministry of Health of Liberia (table 1). The data are reported through WHO country offices.

Taking into account the number of cases as a proportion of an affected country's population, there have been 22 reported cases and 14 deaths per 100 000 population in Guinea, 197 cases and 83 deaths per 100 000 population in Liberia, and 145 cases and 36 deaths per 100 000 population in Sierra Leone.

**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	2127	249	1262
	Probable	263	*	263
	Suspected	26	*	0
	<b>Total</b>	<b>2416</b>	<b>249</b>	<b>1525</b>
Liberia <sup>§</sup>	Confirmed	2946	185	‡
	Probable	1801	*	‡
	Suspected	3050	*	‡
	<b>Total</b>	<b>7797</b>	<b>185</b>	<b>3290</b>
Sierra Leone	Confirmed	6702	1261	1876
	Probable	79 <sup>#</sup>	*	174
	Suspected	1575	*	35
	<b>Total</b>	<b>8356</b>	<b>1261</b>	<b>2085</b>
<b>Total</b>		<b>18 569</b>	<b>1695</b>	<b>6900</b>

Data are based on official information reported by ministries of health, through WHO country offices. 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>Figure may be updated, following data review by the ministry of health. <sup>‡</sup>Data not available. <sup>§</sup>Data are missing for 10-14 December.

A stratified analysis of cumulative confirmed and probable cases indicates that the number of cases in males and females is about the same. There have been 65 reported cases per 100 000 population in males, compared with 66 per 100 000 in females (table 2).

<sup>1</sup>For the Ebola Response Roadmap see: <http://www.who.int/csr/resources/publications/ebola/response-roadmap/en/>

Overall, compared with children, people aged 15 to 44 are three times more likely to be affected (83 per 100 000 population, compared with 28 per 100 000 population). People aged 45 and over are almost four times more likely to be affected (106 reported cases per 100 000 population, compared with 28 per 100 000). This applies to all three intense-transmission countries.

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

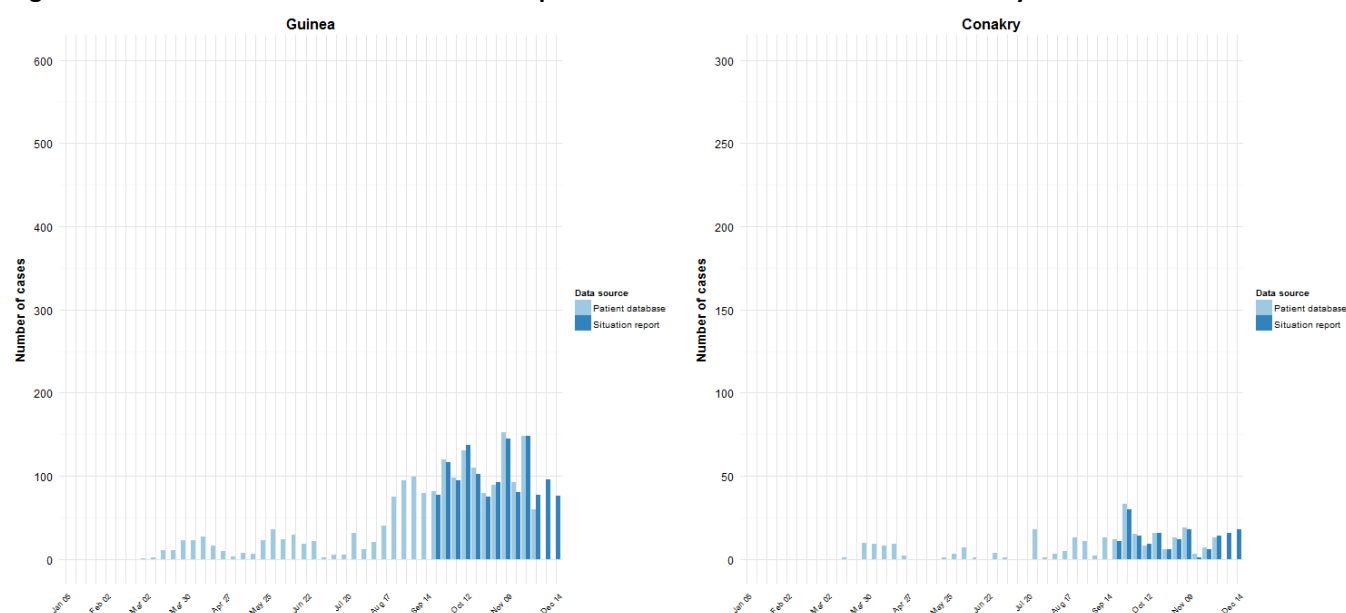
Country	Cumulative cases				
	By sex* (per 100 000 population)		By age group# (per 100 000 population)		
	Male	Female	0-14 years	15-44 years	45+ years
Guinea	1017 (19)	1090 (20)	329 (7)	1216 (26)	545 (35)
Liberia	2538 (128)	2444 (124)	831 (48)	2653 (155)	1015 (190)
Sierra Leone	3112 (109)	3291 (113)	1274 (53)	3587 (139)	1449 (196)
<b>Total</b>	<b>6667 (65)</b>	<b>6825 (66)</b>	<b>2434 (28)</b>	<b>7456 (83)</b>	<b>3009 (106)</b>

Population figures are based on estimates from the United Nations Department of Economic and Social Affairs.<sup>2</sup> \*Excludes cases for which data on sex are not available. #Excludes cases for which data on age are not available.

## GUINEA

A total of 76 new confirmed cases were reported nationally during the week to 14 December (figure 1). The national trend in Guinea has been fluctuating since September, with between 75 and 148 confirmed cases reported each week. There is no clear upward or downward trend in national case incidence.

**Figure 1: Confirmed Ebola virus disease cases reported each week from Guinea and Conakry**



The graphs in figures 1–3 show the number of new confirmed cases reported each week in situation reports from each country (in dark blue; beginning from epidemiological week 38, 15–21 September) and from patient databases (light blue). The patient databases give the best representation of the history of the epidemic. However, data for the most recent weeks are sometimes less complete in the database than in the weekly situation reports. These numbers are subject to change due to ongoing reclassification, retrospective investigation and availability of laboratory results.

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

Transmission remains intense in the capital of Conakry, which reported 18 confirmed cases in the week to 14 December. EVD activity also remains high in the neighbouring district of Coyah (14 confirmed cases). South of Conakry, Forecariah has experienced a surge in new cases, reporting 13 new confirmed cases in the past week. The district reported its first case 12 weeks ago, and until week 50, had reported no more than 4 confirmed cases each week.

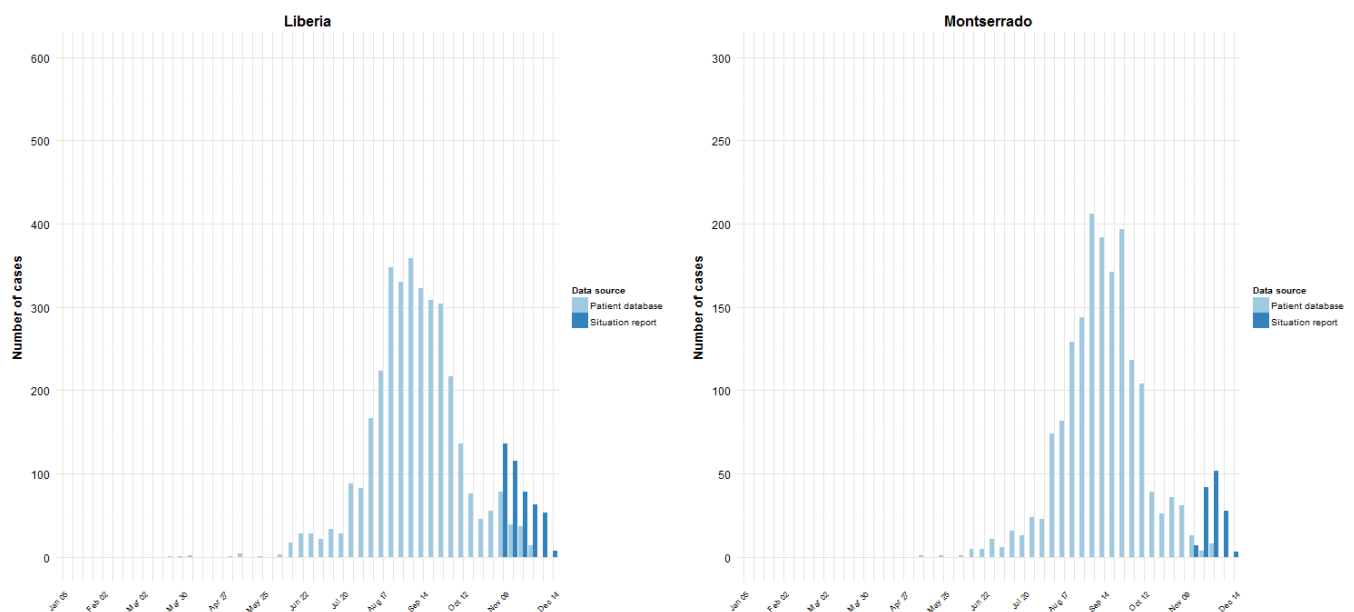
Transmission persists in the eastern district of N’Zérékoré, with 6 new confirmed cases reported in the week to 14 December. The district of Dubréka reported 3 confirmed cases, while new cases continue to be reported in the outbreak’s epicentre of Guéckédou (2 confirmed cases), Kérouané (5 confirmed cases), Lola and Kouroussa (2 confirmed cases in each district). Macenta reported 3 confirmed cases, a sharp decline from the 15 reported in each of the two previous weeks. It is too early, however, to draw conclusions about whether this decline will be sustained.

Télimélé reported 5 new confirmed cases, after reporting last week its first case since June. While the districts of Kindia and Faranah did not report any new confirmed cases, they reported 21 and 12 probable cases respectively. The northern district of Siguiri reported 4 probable cases, and is an area requiring vigilance, particularly because of its proximity to Mali. Although 10 districts in the country are yet to report a case of EVD, there has been a geographical expansion in transmission: at 1 October (week 40), 9 districts had reported a confirmed or probable case during the previous 7 days. By contrast, 17 districts reported new confirmed or probable cases in week 50.

**LIBERIA**

Case incidence has been declining at a national level, with 6 districts reporting new confirmed or probable cases in the week to 14 December. A total of 8 confirmed cases were reported, but this case count accounts for only two days. Transmission remains intense in Montserrado, which includes the capital Monrovia (figure 2). The district reported 3 confirmed and 9 probable cases. Grand Bassa reported 1 confirmed case, after reporting 7 the previous week. Bong (1 confirmed case), Grand Cape Mount (2 confirmed cases) and Margibi (1 confirmed case) are the only other districts to report confirmed cases in the same period. In the north of the country, Lofa reported no cases for the seventh consecutive week, emphasizing the strength of response efforts in the district.

**Figure 2: Confirmed Ebola virus disease cases reported each week from Liberia and Monrovia**



Data are missing for 10-14 December. Systematic data on laboratory confirmed cases have been available since 3 November nationally, and since 16 November for each district.

**SIERRA LEONE**

EVD transmission remains intense in Sierra Leone, with 327 new confirmed cases reported in the week to 14 December. While there are signs from the country situation reports that the increase in incidence has slowed and the incidence may no longer be increasing (figure 3), the country reported the highest number of confirmed cases in epidemiological week 50. Transmission is most intense and persistent in the western and northern districts of the country. The capital, Freetown, accounted for 125 of all new confirmed cases. Other western districts reporting new confirmed cases include Port Loko (56), Western Rural Area (52), Bombali (23) and Kambia (11).

WHO, UN partners and the Government of Sierra Leone have implemented the Western Area Surge, an operation to intensify efforts to curb the disease in the western parts of the country. The response targets Freetown and neighbouring areas to break chains of transmission, and increase the number of beds to ensure patients with clinical symptoms of EVD are isolated and receive appropriate treatment. WHO is training national surveillance officers, epidemiologists and clinical teams to staff new treatment centres. WHO is also assessing infection prevention and control standards in health-care facilities, to maximize the protection of health-care workers and patients.

In the country’s east, the district of Kono, which has experienced high EVD-activity for the past five weeks, reported 12 confirmed cases in the week to 14 December. The neighbouring district of Koinadugu in the north-east reported 3 cases. Transmission has been intense in Tonkolili for the past 13 weeks. However, in recent weeks, the number of new weekly cases has declined from a peak of 56 four weeks ago, to 14 cases in the past week.

In the south of the country, the district of Bo continues to report a high number of new cases (24 confirmed cases). By contrast, the south-eastern districts of Kenema and Kailahun reported 1 and 3 new cases respectively. Only two districts in the country did not report any new cases: Bonthe and Pujehun.

**Figure 3: Confirmed Ebola virus disease cases reported each week from Sierra Leone and Freetown**

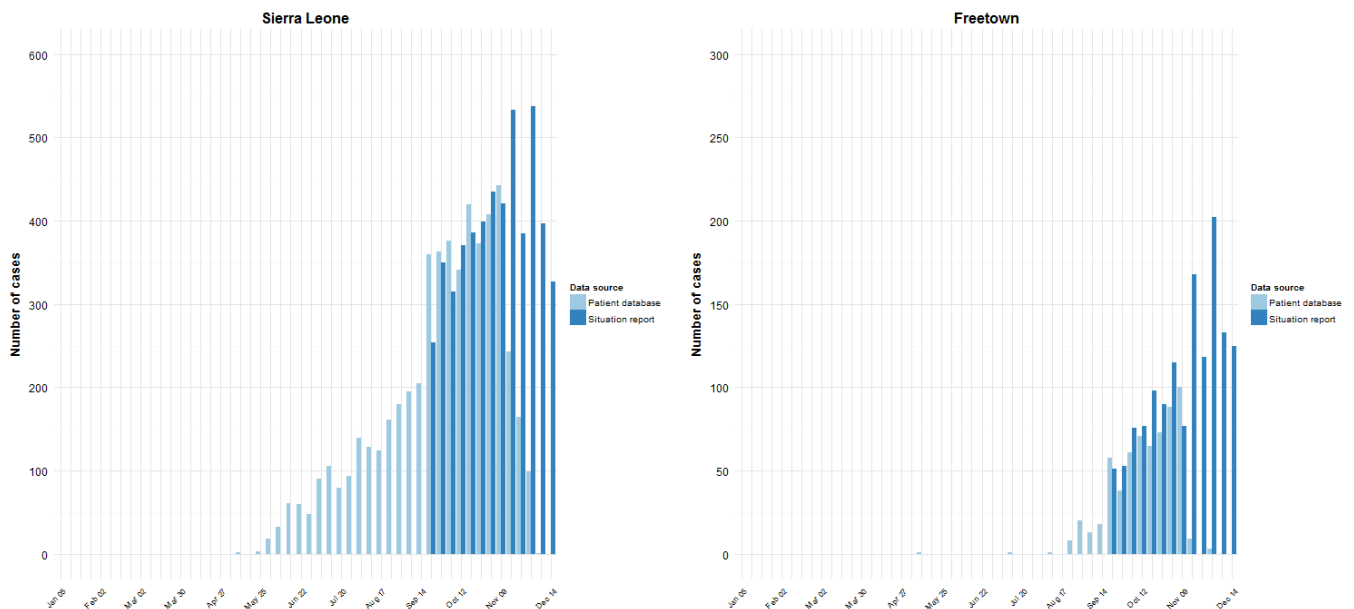
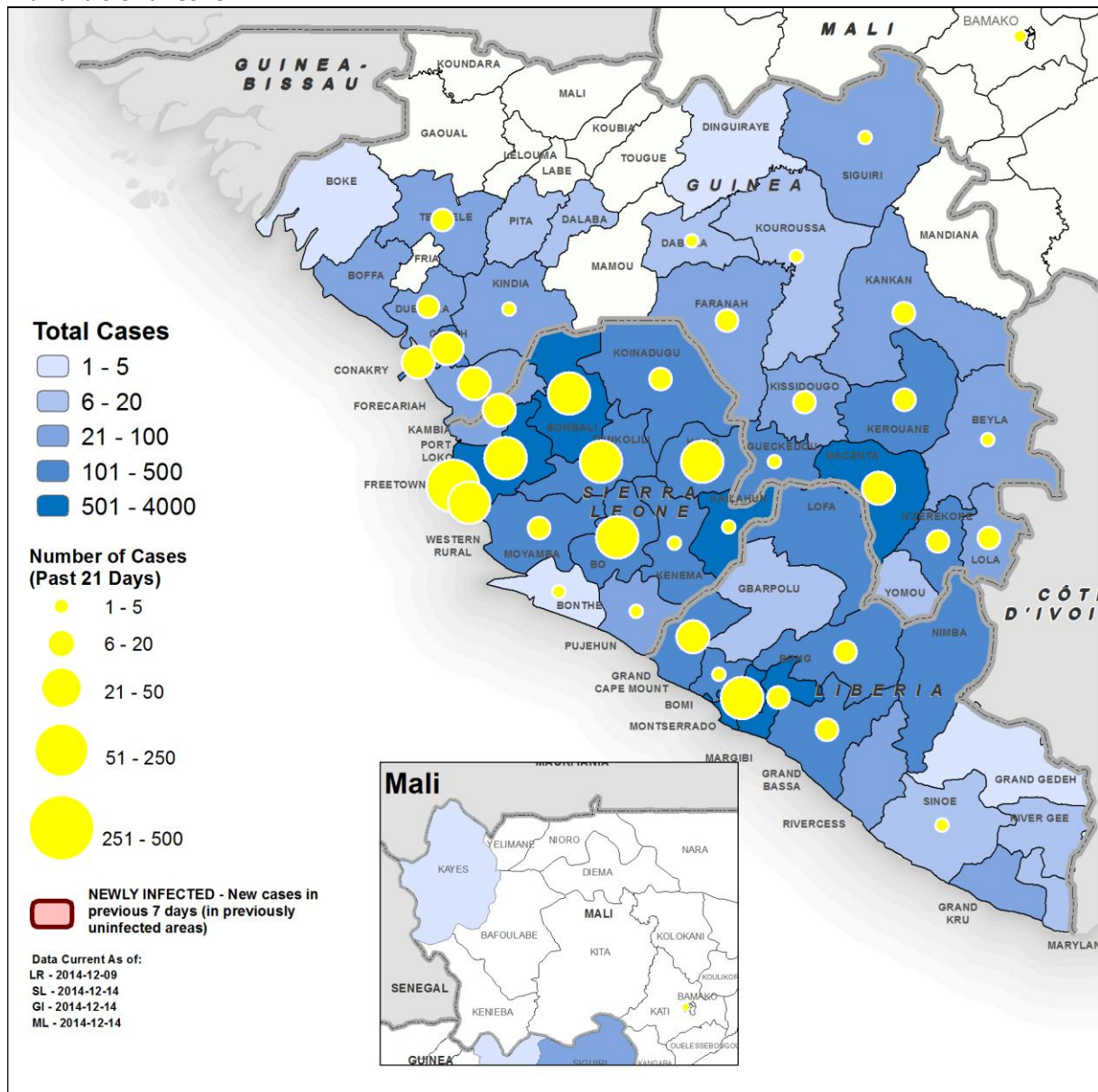


Figure 4: Geographical distribution of new and total confirmed and probable\* cases in Guinea, Liberia, Mali and Sierra Leone



Data are based on situation reports provided by countries. 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. Data are missing from Liberia for 10-14 December. \*Data for the past 21 days represent confirmed cases in Guinea, Liberia, Mali and Sierra Leone.

### RESPONSE IN COUNTRIES WITH WIDESPREAD AND INTENSE TRANSMISSION


A comprehensive 90-day plan is being implemented to control and reverse the EVD outbreak in West Africa (see UN Mission for Ebola Emergency Response: Annex 2). Among the plan’s key objectives is, by 1 January 2015, to treat and isolate 100% of EVD cases, and bury 100% of patients who die from EVD safely and with dignity. The various agencies that coordinate each part of the response are shown in Annex 3. Tables 3 to 5 provide information on progress in the two domains, case management and case finding (laboratory confirmation and contact tracing), for which WHO is the lead agency, and information on social mobilization and the capacity to conduct safe burials.



## Case management

Providing the capacity to treat patients with EVD in facilities that allow them to be isolated from other patients and the community is central to the EVD response. At present, most of this capacity is concentrated in Ebola Treatment Centres (ETCs); large facilities ranging from 20 to 200 beds. Community Care Centres (CCCs) provide an alternative to care in ETCs in areas where there is insufficient ETC capacity, and remote areas that are not yet served by an ETC. Compared with ETCs, CCCs are smaller, with 8 to 30 beds per facility. This means they are easier to set up, which enables response coordinators to provide more rapid, flexible coverage dispersed over a wider geographical area.

**Table 3. Key performance indicators for the Ebola response in Guinea**

Indicator	Source dates	Current status	% of planned / target
% of districts with laboratory services accessible within 24h	As of 14/12/14	100%	100%
% of ETC beds operational	As of 15/12/14	37% (230 beds)	695 beds
% of CCC beds operational	As of 15/12/14	0%	328 beds
Capacity to isolate patients (beds per reported patient)	24/11/14–14/12/14	Average 2.4 beds per reported patient	
Case fatality rate (%) among hospitalized patients	Cumulative (to 14/12/14)	60%	
% of registered contacts to be traced who were reached daily	08/12/14–14/12/14	96%	
# of newly infected national HCWs	08/12/14–13/12/14	 (N'zerekore – 3, Kerouané – 2)	
% of burial teams trained and in place	As of 06/12/14	83% (50 teams)	60 teams
% of districts with a list of identified key religious leaders or community groups who promote safe and dignified burials	As of 15/12/14	72%	

Definitions for each indicator are found in Annex 2.

Capacity to treat and isolate patients is used as a proximate measure of the proportion of EVD cases that are isolated. Using this proximate measure of isolation at a national level, all three intense-transmission countries currently have the capacity to isolate all reported cases. In Guinea (table 3) there are 2.4 available beds per reported confirmed and probable EVD case, in Liberia (table 4) there are 8.2 beds for every confirmed and probable case (the number is lower if suspected cases are included), and in Sierra Leone there are 2.4 beds for every confirmed and probable case (table 5).

However, these numbers are, to a degree, an oversimplified representation of a more complicated situation within each country. In several areas of Sierra Leone, particularly in the country's west where transmission remains intense, more beds are required to isolate and treat the large number of cases. One of the aims of the Western Area Surge is to increase bed capacity to meet this need. In districts in other parts of the country, such as Kenema and Kailahun in south-eastern Sierra Leone, the low number of cases means there is now spare isolation and treatment capacity.

As of 15 December, 230 EVD-treatment and isolation beds were operational in Guinea, concentrated in 4 ETCs located in the capital, Conakry, and the south-eastern districts of Guéckédou and Macenta. A bed is considered operational when it is staffed and ready to receive patients. This uneven distribution of capacity means that any patient with EVD in the north and centre of the country needs to travel long distances to access treatment. In addition, the populations of several areas in the eastern Guinean region are more likely to seek treatment in the north of the country than they are to seek treatment in nearby Guéckédou or Macenta. A new ETC has opened in N'zérékoré in the east of the country. Planned ETCs in the eastern districts of Kérouané, Coyah and Beyla should also help address this distribution problem. There are currently no CCCs in Guinea. The country is basing its community strategy on alternative treatment facilities and Community Watch Committees, which disseminate information and act as liaisons between the population and available services.

**Table 4. Key performance indicators for the Ebola response in Liberia**

Indicator	Source dates	Current status	% of planned / target
% of districts with laboratory services accessible within 24h	As of 14/12/14	100%	100%
% of ETC beds operational	As of 14/12/14	53% (650 beds)	1219 beds
% of CCC beds operational	As of 14/12/14	23% (98 beds)	428 beds
Capacity to isolate patients (beds per reported patient)	24/11/14–14/12/14	Average 8.2 beds per reported patient	
Case fatality rate (%) among hospitalized patients	Cumulative (to 14/12/14)	58%	
% of registered contacts to be traced who were reached daily	08/12/14–09/12/14	91%	
# of newly infected national HCWs	08/12/14–09/12/14	(0)	
% of burial teams trained and in place	As of 23/11/14	77% (77 teams)	100 teams
% of districts with a list of identified key religious leaders or community groups who promote safe and dignified burials	As of 15/2/14	0%	

In Liberia, 650 beds are operational in 12 ETCs: 6 ETCs are located in the capital, Monrovia, 3 are in Margibi, and the districts of Bomi, Bong and Nimba each have 1 ETC. There are currently 4 CCCs open, 1 in each of Grand Cape Mount and River Gee, and 2 in Margibi. Of the three countries with widespread and intense transmission, capacity for treatment and isolation is most evenly distributed in Liberia. The number of operational beds in the country previously included those that could become rapidly available in a short period of time to meet local need. It now refers to the number of beds that are fully staffed, equipped and open. The planned number of beds now refers to beds that can be scaled up rapidly to meet local need. This reflects a shift to focus on current rather than anticipated need.

In Sierra Leone, a total of 615 treatment and isolation beds are operational. There are 2 ETCs in Kerry Town and Port Loko, 4 ETCs in Freetown, and 1 ETC in each of Lakka, Kailahun, Kenema, Bo Town, Waterloo, Bombali, and the Western Urban Area. There are 329 CCCs beds.



**Table 5. Key performance indicators for the Ebola response in Sierra Leone**

Indicator	Source dates	Current status	% of planned / target
% of districts with laboratory services accessible within 24h	As of 14/12/14	100%	100%
% of ETC beds operational	As of 16/12/14	30% (615 beds)	2020 beds
% of CCC beds operational	As of 16/12/14	27% (329 beds)	1208 beds
Capacity to isolate patients (beds per reported patient)	24/11/14 – 14/12/14	Average 2.4 beds per reported patient	
Case fatality rate (%) among hospitalized patients	Cumulative (to 14/12/14)	60%	
% of registered contacts to be traced who were reached daily	08/12/14 – 13/12/14	86%	
# of newly infected national HCWs	08/12/14 – 14/12/14	(0)	
% of burial teams trained and in place	As of 14/12/14	86% (98 teams)	114 teams
% of districts with a list of identified key religious leaders or community groups who promote safe and dignified burials	As of 15/12/14	100%	

### Case fatality

The cumulative case fatality rate in the three intense-transmission countries among all probable and confirmed cases for whom a definitive outcome is recorded is 70%. For those patients recorded as hospitalized, the case fatality rate is 60% in each of Guinea and Sierra Leone and 58% in Liberia (tables 3–5).

### Laboratories

Providing capacity for prompt and accurate diagnosis of cases of EVD is an integral part of the response to the EVD outbreak. All 53 EVD-affected districts (those that have ever reported a probable or confirmed case) have access to laboratory support (figure 6). Access is defined as having the logistical capacity to transport a sample to a laboratory by road within 24 hours of sample collection. As of 15 December, 21 laboratories have the capacity to confirm EVD cases: 4 in Guinea, 8 in Liberia and 9 in Sierra Leone. These laboratories currently serve 24 affected districts in Guinea, 15 in Liberia and 14 in Sierra Leone. Two more laboratories in Sierra Leone and one more in Liberia are pending.

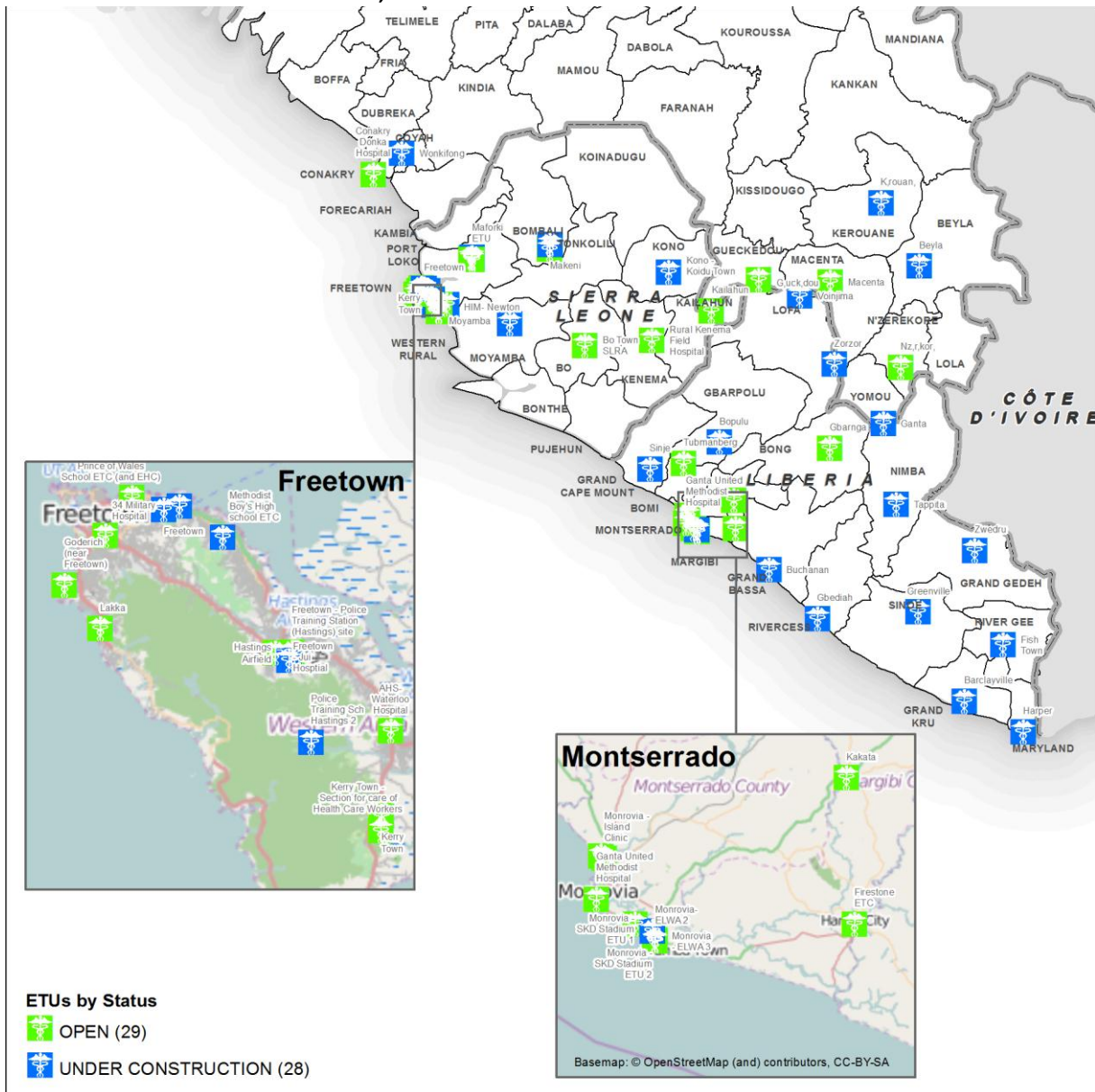
### Contact tracing and case finding

Effective contact tracing ensures that the reported and registered contacts of confirmed EVD cases are visited daily to monitor the onset of symptoms during the 21-day incubation period of the Ebola virus. Contacts presenting symptoms should be promptly isolated, tested for EVD, and if necessary treated, to prevent further disease transmission.

During the week to 13 December, 96% of all registered contacts were visited on a daily basis in Guinea, 91% in Liberia, and 86% in Sierra Leone (a steady decline since week 44, during which 94% of registered contacts were reached). However, the proportion of contacts reached was lower in many districts (as low as 18% in Kenema in

Sierra Leone), while 100% of contacts were reached in some districts. Each district is reported to have at least one contact-tracing team in place.

Figure 5. Ebola Treatment Centres in Guinea, Liberia and Sierra Leone



Four ETUs in Sierra Leone and one in Liberia are not shown.

On average, during the past 21 days, 15 contacts were listed per new confirmed case in Guinea, 20 in Liberia and 5 in Sierra Leone (the last country did not provide contact-tracing data for epidemiological week 50). Active case-finding teams are being mobilized as a complementary case-detection strategy in several areas.

**Health-care workers**

A total of 649 health-care workers (HCWs) are known to have been infected with EVD up to the end of 14 December, 365 of whom have died (table 6). The total case count includes 2 HCWs in Mali, 11 HCWs infected in Nigeria, 1 HCW infected in Spain while treating an EVD-positive patient, and 3 HCWs in the USA (including a HCW infected in Guinea, and 2 HCWs infected during the care of a patient in Texas). Five HCW infections were reported in the week to 14 December, all in Guinea (including 3 in N’Zerekoré and 2 in Kérouané).

Extensive investigations to determine the source of exposure in each case are being undertaken. Early indications are that a substantial proportion of infections occurred outside the context of Ebola treatment and care centres.

**Table 6: Ebola virus disease infections in health-care workers in the three countries with intense transmission**

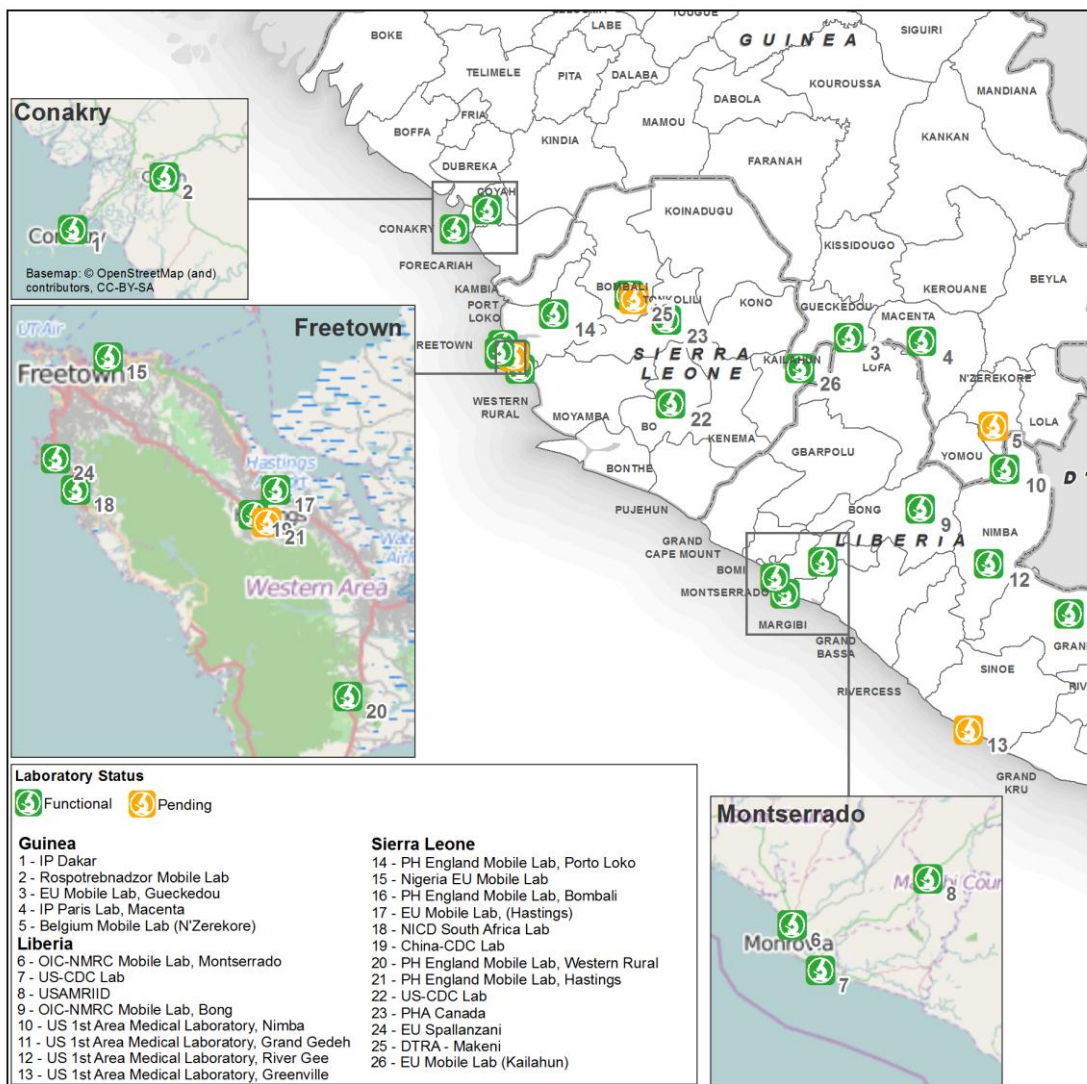
Country	Cases	Deaths
Guinea	125	72
Liberia*	365	177
Sierra Leone	142	109
<b>Total</b>	<b>632</b>	<b>358</b>

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. \*Data are missing for 10–14 December.

**Safe and dignified burials**

There are 225 safe burial teams trained and in place: 50 teams in Guinea, 77 teams in Liberia and 98 teams in Sierra Leone and (as of 6 December in Guinea, 23 November in Liberia, and 14 December in Sierra Leone). Both Guinea and Sierra Leone now have more than 80% of planned trained safe burial teams in place, whilst Liberia has 77% of teams in place. All three countries have sufficient capacity to safely bury all reported EVD-related fatal cases, although it is possible that capacity remains inadequate in some districts.

**Figure 6. Status of laboratories deployed in the affected countries to support the Ebola outbreak response**



Many safe burials that take place are of people who did not die from Ebola, because the symptoms of the disease are similar to those of other conditions. Deaths continue to be under-reported in this outbreak, so some burials are unreported.

By contrast with the distribution of capacity to isolate and treat patients, the geographical distribution of safe burial teams is far more even across the three intense-transmission countries, though some more remote areas may still be underserved.

The International Federation of Red Cross and Red Crescent Societies (IFRC) is currently the only organization involved in safe burials across all three of the intense-transmission countries. The non-governmental organization Global Communities operates in Liberia, and Concern Worldwide operates in Liberia and Sierra Leone. Data on the number of safe burials to have taken place only includes burials done by IFRC and Global Communities.

### **Community engagement and social mobilization**

Social mobilization promotes the adoption of preventive strategies, helps communities to gain a better understanding of Ebola, and dispels misconceptions about the disease. UNICEF is the lead agency in social mobilization during this Ebola outbreak in the three intense-transmission countries, supported by partners and WHO.

Engaging communities in Ebola-affected countries is essential to reduce the spread of disease. Fear may prompt people with clinical symptoms to avoid seeking medical treatment, leading to the unsafe practice of family members caring for sick people at home. Social mobilization activities can encourage people with Ebola symptoms to seek early medical care and, if confirmed as a case of EVD, to be appropriately isolated.

With burials continuing to be a significant source of infection, conducting burials safely and with dignity is crucial to curbing the spread of disease. Religious leaders and community groups play a major role in a range of community engagement activities, including promoting and implementing safe burial practices according to standard guidelines. As of 13 December, every district in Sierra Leone has a list of identified key religious leaders or community groups promoting such burial practices. In Guinea, 72% of districts have such a list. Data are not available for Liberia.

Fear, limited understanding and/or misconceptions in the community about Ebola and limited cultural sensitivity among some workers in the response may lead to incidents that place the safety of health-care and other workers at risk. In the week to 13 December, at least one security incident or other form of refusal to cooperate was reported in 8% of districts in Guinea, 13% of districts in Liberia and 14% of districts in Sierra Leone.

Social mobilization taskforces have been established to develop activities that aim to promote burial practices that are safe and culturally acceptable, and to inform communities of the need for appropriate isolation and treatment for those with EVD. Of the districts that have established such a taskforce, every district in Liberia is monitoring the status and progress of community sensitization activities, 86% of districts in Guinea and 50% of districts in Sierra Leone.

In Guinea, social mobilization activities include the establishment of 1150 Community Watch Committees. These committees comprise community leaders and residents who disseminate information and act as liaisons between the population and available services. In another community engagement strategy, the national government sent ministers to districts where safety incidents against health-care and other workers had occurred, to engage communities to work better with Ebola responders.

In Liberia, following an outbreak in the town of Quewin in Grand Bassa County, UNICEF and partners organized a social mobilization team to educate the quarantined and neighbouring communities in strategies to prevent further transmission, including rapidly reporting and isolating sick family members and monitoring the community for suspected cases. Many of these communities were difficult to reach. In the week to 13 December, information



about Ebola prevention was provided to more than 11 000 households, as part of a door-to-door campaign across 15 counties. Additionally, almost 20 000 women, more than 13 000 men and more than 11 000 children were reached through more than 200 meetings and group discussions.

In Sierra Leone, UNICEF continues to coordinate and support social mobilization activities across the country, especially with rapid response activities targeting districts of intense transmission and hard-to-reach areas. Strategies include street-to-street announcements, motorbike rallies and home visits to educate communities about safe and dignified burial practices, early referral and isolation, and home protection. Of the 3081 social mobilization personnel who have been trained, 39% are women, and 63% are aged 25 or under. The training is focused on Ebola prevention, home protection, safe burial practices and the quarantine of households of patients with confirmed or probable EVD.

### Budget

As of 5 December, WHO had received US\$186.8 million, with a further \$31.9 million pledged.

## 2. COUNTRIES WITH AN INITIAL CASE OR CASES, OR WITH LOCALIZED TRANSMISSION

Five countries (Mali, Nigeria, Senegal, Spain and the United States of America) have reported a case or cases imported from a country with widespread and intense transmission (table 7). A total of 8 cases (7 confirmed and 1 probable), including 6 deaths (5 confirmed, 1 probable), have been reported in Mali. The most recent 7 cases are in the Malian capital Bamako, and are not related to the country's first EVD case, who died in Kayes on 24 October. The last confirmed case tested negative for the second time on 6 December, and was discharged from hospital on 11 December. All identified contacts connected with both the initial case and the outbreak in Bamako have now completed 21 day follow-up. In the United States of America, there have been 4 cases of EVD and 1 death. One HCW in New York and 2 HCWs in Texas have tested negative for EVD twice and have been released from hospital. All contacts in the country have completed the 21-day follow-up period.

**Table 7: Ebola virus disease cases and deaths in Mali and the United States of America**

Country	Cumulative cases					Contact tracing			
	Confirmed	Probable	Suspect	Deaths	Health-care 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
Mali	7	1	0	6	25%	0	433	6 December 2014	11
United States of America	4*	0	0	1	75%	0	177	9 November 2014	38

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. \*Includes two HCWs infected in the USA while treating a patient with EVD from Liberia, and a HCW infected in Guinea who developed symptoms in the USA.

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

The evolving EVD outbreak highlights the considerable risk of cases being imported into unaffected countries. With adequate levels of preparation, however, such introductions of the disease can be contained with a rapid and adequate response. The success of Nigeria and Senegal in halting the transmission of EVD highlights the critical importance of preparedness. Key factors in preventing the spread of EVD in both countries included strong political leadership, early detection and response, public awareness campaigns, and strong support from partner organizations. WHO's preparedness activities aim to ensure all countries are operationally 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, direct technical assistance to countries, and

the provision of technical guidance and tools.

### Priority countries in Africa

The initial focus of support by WHO and partners is on highest priority countries – Cote 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, international preparedness strengthening teams have provided technical support in 14 countries: Benin, Burkina Faso, Cameroon, Central African Republic, Cote d'Ivoire, Ethiopia, Gambia, Ghana, Guinea Bissau, Mali, Mauritania, Niger, Senegal and Togo. Technical working group meetings, field visits, high-level exercises and field simulation exercises have helped to identify key areas for improvement. Each country now has a tailored 90-day plan to strengthen operational readiness for response.

WHO and partners have immediately deployed staff to all 14 countries that have received country visits to implement these 90-day plans and to coordinate technical assistance across all key preparedness components. Budgeted operational preparedness and response plans in priority countries have been presented to technical and financial partners for support. Coordination structures for Incident Management and Emergency Operations Centres have been set up, or are in the final stages of establishment, in seven of 14 priority countries (Cameroon, Gambia, Ghana, Guinea-Bissau, Mali, Mauritania and Senegal). In all 14 countries, exercises have been held to review plans, raise awareness and share information, with the aim of identifying planning gaps. Functional field exercises and drills have been held in three priority countries (Benin, Cameroon and Mali). Risk communication training has commenced, targeting all priority countries.

### Preparedness in the rest of the world

WHO is expanding preparedness efforts to other countries in Africa and all regions. Fifty-two countries have been visited in Europe, the Americas, South-East Asia, and the Western Pacific and Eastern Mediterranean regions.

### 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 identifies 10 key components and tasks for countries preparing their health systems to identify, detect and respond to EVD. The 10 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, and capacity building for points of entry.<sup>3</sup> 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>4</sup>

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

<sup>4</sup> <http://www.who.int/csr/resources/publications/ebola/preparedness/en/>



**ANNEX 1: CATEGORIES USED TO CLASSIFY EBOLA CASES**

EVD cases are classified as suspected, probable, or confirmed.

**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: UN MISSION FOR EBOLA EMERGENCY RESPONSE: DEFINITIONS OF KEY PERFORMANCE INDICATORS**

The first-ever UN mission for a public health emergency, the UN Mission for Ebola Emergency Response (UNMEER), has been established to address the unprecedented EVD outbreak. WHO is a partner in the mission. Its strategic priorities are to stop the spread of the disease, treat infected patients, ensure essential services, preserve stability, and prevent the spread of EVD to unaffected countries. Response monitoring indicators are calculated using the following numerators and denominators:

Indicator	Numerator	Numerator source	Denominator	Denominator source
% of districts with laboratory services accessible within 24h	# of EVD-affected districts able to send samples to a laboratory within 24h	National laboratories	# of EVD-affected districts: reported a probable or confirmed EVD case	Clinical investigation records
% of ETC beds operational	# of ETC beds operational	WHO	# of ETC beds planned	UNMEER
% of CCC beds operational	# of CCC beds operational	UNMEER	# of CCC beds planned	UNMEER
Capacity to isolate patients (beds per reported patient)	Number of operational ETC and CCC beds	WHO / UNMEER	Average number of probable and confirmed EVD cases (last 21 days)	Country situation reports
Case fatality rate (%) among hospitalized patients	# of deaths among hospitalized patients	Clinical investigation records	# of hospitalized patients with probable or confirmed EVD for whom a definitive survival outcome is reported	Clinical investigation records

Indicator	Numerator	Numerator source	Denominator	Denominator source
% of registered contacts to be traced who were reached daily	# of registered contacts to be traced who were reached daily	Country situation reports	# of contacts currently registered	Country situation reports
# of newly infected HCWs*	# of newly infected HCWs	Country situation reports	N/A	N/A
% of burial teams trained and in place	# of burial teams trained and in place	IFRC/WHO/UN MEER	# of burial teams planned	UNMEER
% of districts, counties etc. with list of identified key religious leaders or community groups who promote safe funeral and burial practices according to standard guidelines	# of locations with list of identified religious leaders / influencers who promote safe burial practices	UNICEF	# of districts with list of identified religious leaders or established community groups	UNICEF

\*Used as a proximate measure of the effectiveness of infection prevention and control measures in EVD treatment facilities.

### ANNEX 3: COORDINATION OF THE EBOLA RESPONSE

Response activity	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
Crisis management	UNMEER
Logistics	UNMEER and World Food Programme
Cash payments coordination	United Nations Development Programme
Staffing	UNMEER
Training	WHO and US Centers for Disease Control and Prevention
Information management	UNMEER