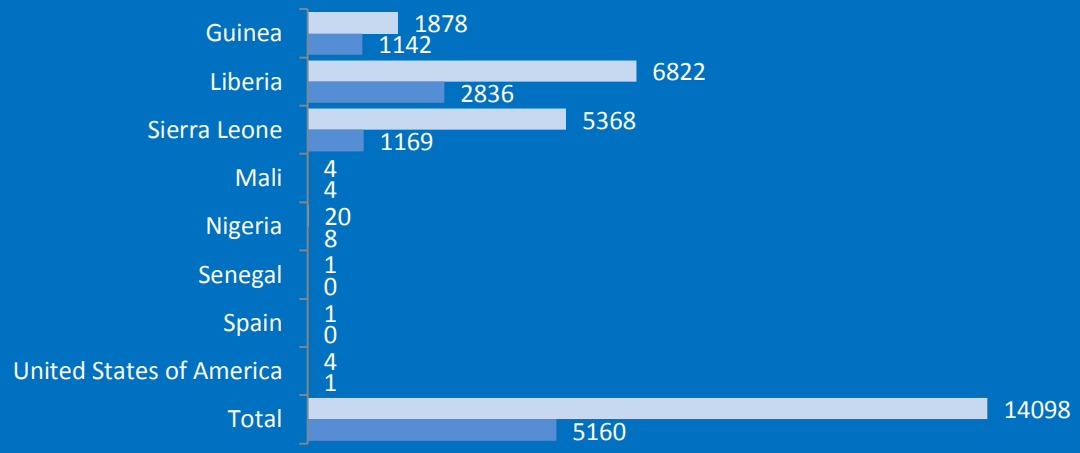
EBOLA RESPONSE ROADMAP SITUATION REPORT

12 NOVEMBER 2014

HIGHLIGHTS

- There have been 14 098 reported cases of Ebola, with 5160 reported deaths.
- Transmission remains intense in Guinea, Liberia and Sierra Leone, and case incidence is still increasing in Sierra Leone.
- Interventions to contain the disease include infection prevention and control; diagnosing, isolating and treating patients; contact tracing; and safe and dignified burials.
- A total of 4 confirmed and probable cases and 4 deaths have been reported in Mali.
- All Ebola patients in the United States of America have been discharged from hospital.

CASES/ DEATHS



SUMMARY

A total of 14 098 confirmed, probable, and suspected cases of Ebola virus disease (EVD) have been reported in six affected countries (Guinea, Liberia, Mali, Sierra Leone, Spain and the United States of America) and two previously affected countries (Nigeria and Senegal) up to the end of 9 November. There have been 5160 reported deaths.

There is some evidence that case incidence is no longer increasing nationally in Guinea and Liberia, but steep increases persist in Sierra Leone. A mixed picture emerges at the district level. Transmission is consistently high in Conakry and Macenta in Guinea; Montserrado in Liberia; and in the western and northern areas of Sierra Leone. Declines in incidence continue in Lofa in Liberia; and Kenema and Kailahun in Sierra Leone. Cases and deaths continue to be under-reported in this outbreak.

In Mali, there have been 4 reported confirmed and probable cases, and 4 deaths. The most recent cases are not related to the first EVD-positive patient in Mali, who died on 24 October.

Interventions to contain the disease in the three most affected countries include isolating and treating patients, identifying their contacts and conducting burials in a safe and dignified manner. In the three most affected countries, 19 of 53 planned Ebola Treatment Centres are now open. A total of 140 trained burial teams are on the ground, and more than 4400 burials have reportedly been conducted in a safe and dignified manner since the outbreak began. Samples from all 53 Ebola-affected districts can be sent to a laboratory within 24 hours by road.

Situation reports are now presented in a web-based format to provide detailed information at the country level, including data and maps, in a more interactive way.

OUTLINE

This situation report on the Ebola Response Roadmap[1] 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 accuracy 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. An overview of a separate, unrelated outbreak of EVD in the Democratic Republic of the Congo is also provided (Annex 3).

1. COUNTRIES WITH WIDESPREAD AND INTENSE TRANSMISSION

A total of 14 068 confirmed, probable, and suspected cases of EVD and 5147 deaths have been reported up to the end of 9 November 2014 by the Ministries of Health of Guinea and Sierra Leone, and 8 November by the Ministry of Health of Liberia (table 1). The data are reported through the WHO country offices.

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	1612	313	934
	Probable	208	12	208
	Suspected	58	*	0
	All	**1878**	**325**	**1142**
Liberia	Confirmed	2553	335**	*
	Probable	1687	131**	*
	Suspected	2582	*	*
	All	**6822**	**466****	**2836**
Sierra Leone	Confirmed	4523	1197	960
	Probable	79	14	174
	Suspected	766	*	35
	All	**5368**	**1211**	**1169**
Total		**14 068**	**2002**	**5147**

*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. *Data not available. **Data for Liberia are for the past 18 days.*

GUINEA

Intense EVD transmission persists in Guinea, despite the incidence stabilizing in some districts. Case numbers have been fluctuating but remain consistently high. There were 145 new confirmed cases reported in Guinea in the week to 9 November. Disease transmission continues to be high in Macenta in the country's south-west near the Liberian border. The district reported 33 new confirmed cases in that week.

Transmission is persistent in the neighbouring district of Kerouane, which reported 30 new cases. N'Zerekore and Beyla also remain areas of high EVD activity, reporting 22 and 12 new confirmed cases respectively.

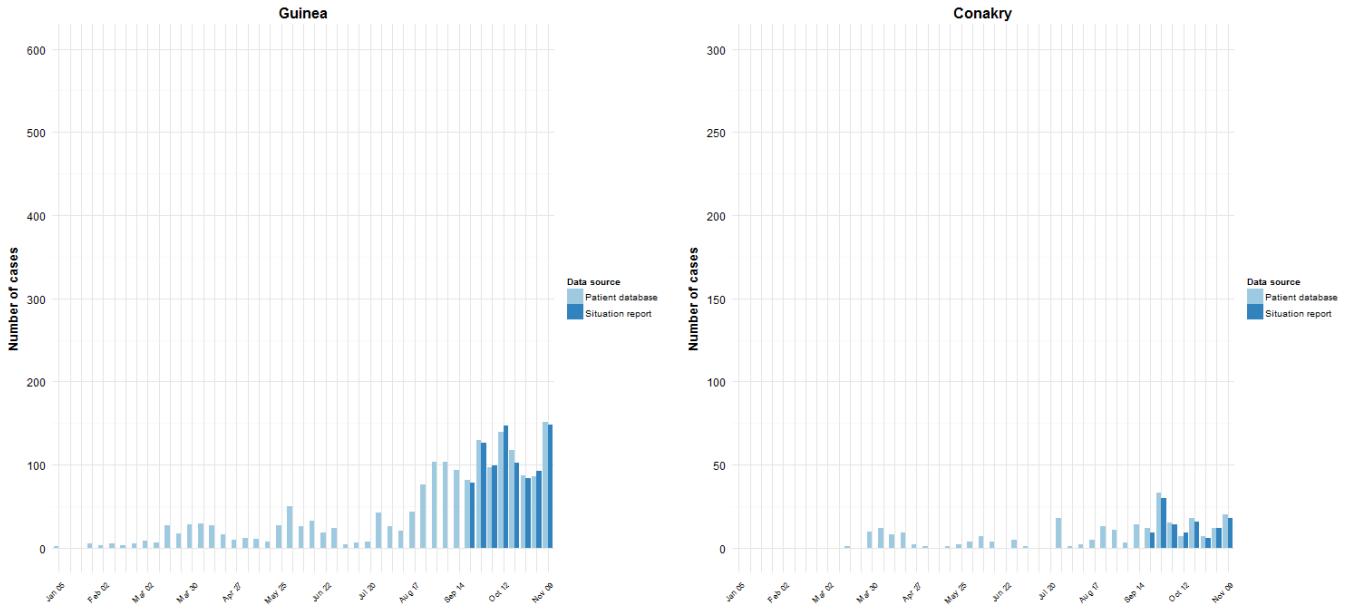
[1]For the Ebola Response Roadmap see: http://www.who.int/csr/resources/publications/ebola/response-roadmap/en/

The capital of Conakry continues to require sustained efforts to control the disease. The city reported 18 confirmed cases in the past week (figure 1). Faranah and Coyah are also maintaining high levels of EVD activity, reporting 10 and 6 new confirmed cases respectively in that week.

The district of Siguiri, which borders Mali, reported 3 new confirmed cases. A high level of vigilance is required in the area, particularly due to its proximity to Mali, which has reported more cases in this outbreak.

New case numbers have been declining in the outbreak's epicentre of Gueckedou, which reported 1 confirmed case in the past week, after not reporting a single case the previous week. Of a total of 34 districts in Guinea, 10 remain unaffected by Ebola. By contrast, every district in Liberia and Sierra Leone have been affected.

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



The epidemic curves in figures 1-3 show separately the weekly case numbers provided in country situation reports (beginning from epidemiological week 38, 15-21 September) and from patient databases. In general, the patient databases give the best representation of the history of the epidemic. However, data for the most recent weeks are sometimes less complete than in the weekly situation reports. These numbers are subject to change due to ongoing reclassification, retrospective investigation and availability of laboratory results.

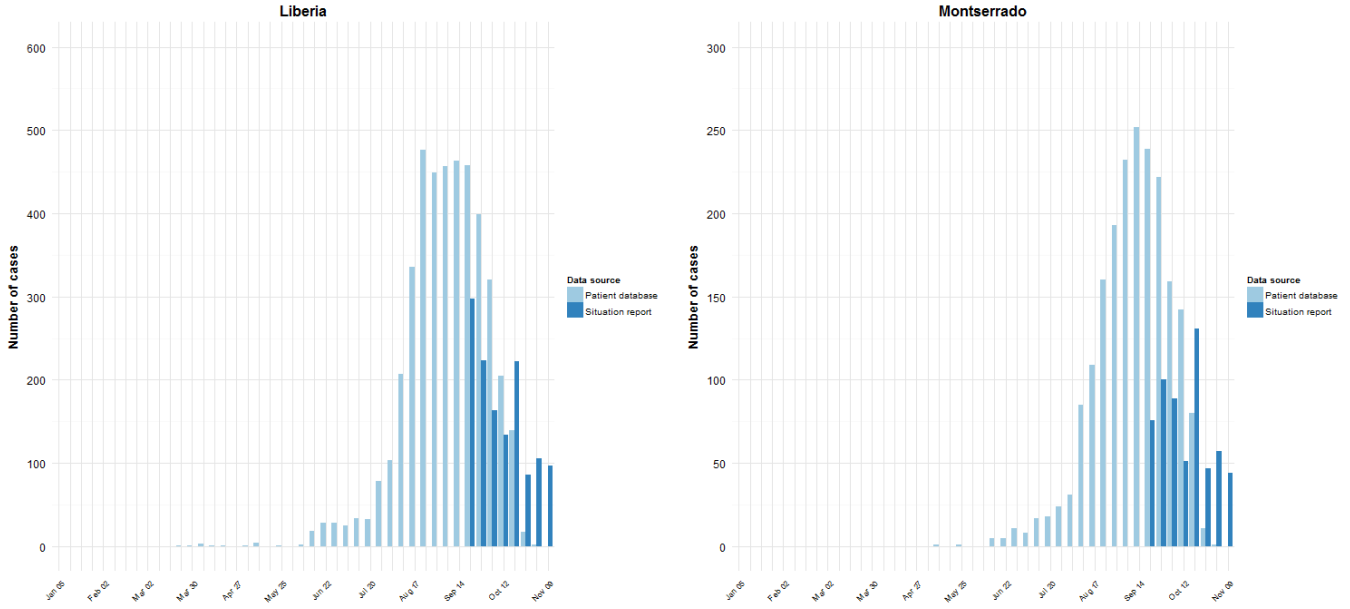
LIBERIA

Weekly case numbers fell in Liberia from mid-September to the end of October. This decline has since stabilized, and a reversal of this trend is possible. Liberia reported 97 confirmed and probable cases in the week to 8 November.

Efforts to control the disease remain critical, particularly in the capital of Monrovia (figure 2). The Montserrado district, which includes Monrovia, accounted for 44 of the new confirmed and probable cases reported in that week.

Case incidence is declining in the neighbouring district of Marigibi, but high transmission persists. Other areas of high transmission include Bomi and Bong. Lofa, however, has experienced a consistent decline in new weekly cases.

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



SIERRA LEONE

EVD transmission remains high in Sierra Leone, with 421 new confirmed cases reported in the week to 9 November. Much of this was driven by intense transmission in the country's west and north. Transmission remains intense in the capital Freetown, which reported 77 new confirmed cases in the past week (figure 3). High levels of activity also persist in the nearby Bombali and the Western rural area, which each reported 69 confirmed cases. Port Loko and Tonkolili each reported 56 confirmed cases.

Koinadugu and Kambia reported 25 and 6 confirmed cases respectively, making both districts emerging areas of concern. However, the neighbouring areas of Kenema and Kailahun have continued to experience sharp declines in incidence. The latter reported 3 confirmed cases in the past week. Kenema did not report a single case and has not had a confirmed case since 1 November. This reflects the breadth of response efforts in the district, including isolating EVD-positive patients, tracing and monitoring their contacts, and robust infection and prevention control measures.

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

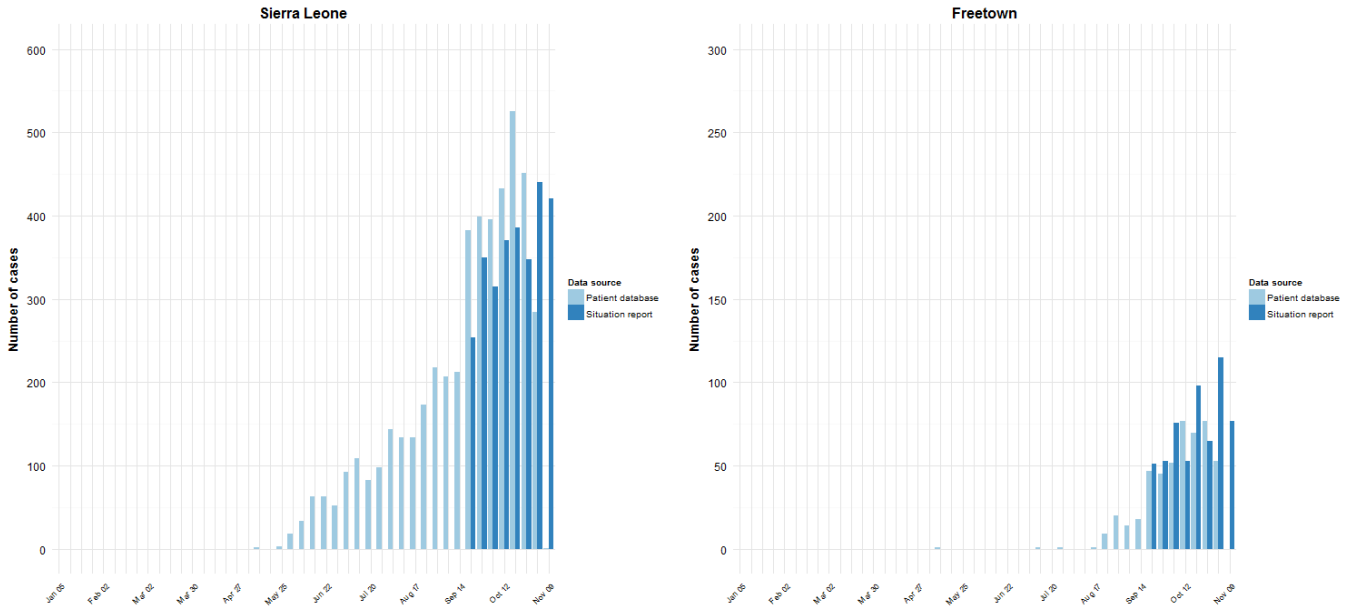
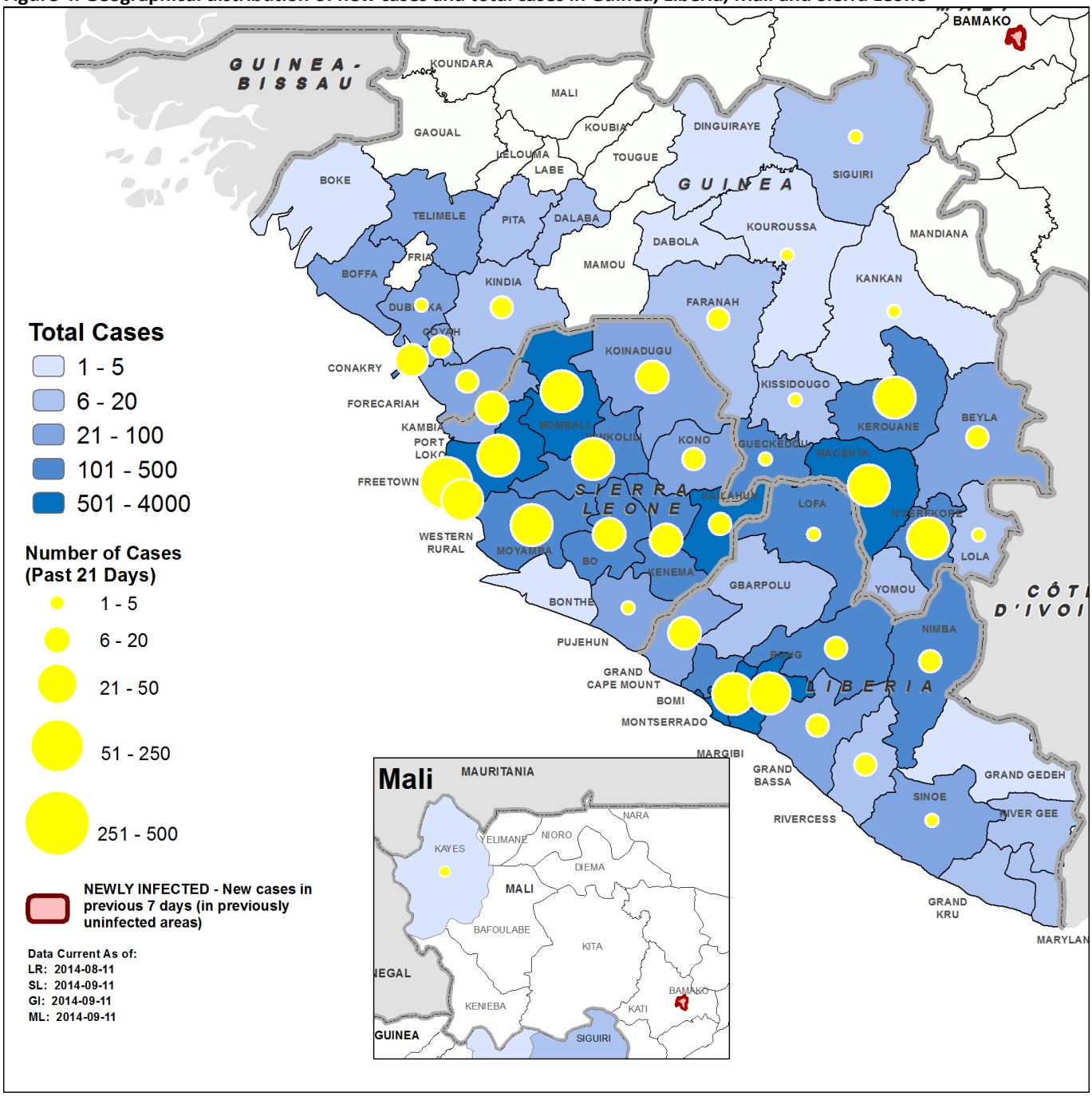


Figure 4: Geographical distribution of new cases and total cases in Guinea, Liberia, Mali and Sierra Leone



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.

RESPONSE IN COUNTRIES WITH WIDESPREAD AND INTENSE TRANSMISSION

A comprehensive 90-day plan has been 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 to have the capacity to isolate at least 70% of EVD cases and safely bury at least 70% of patients who die from EVD by 1 December 2014 (the 60-day target). The ultimate goal is to have capacity to isolate 100% of EVD cases and safely bury 100% of patients who die from EVD by 1 January 2015 (the 90-day target).

Data on a range of indicators are being collected, to provide a more complete understanding of the Ebola outbreak, and monitor its response. Systems for data collection are being implemented, and it is anticipated that

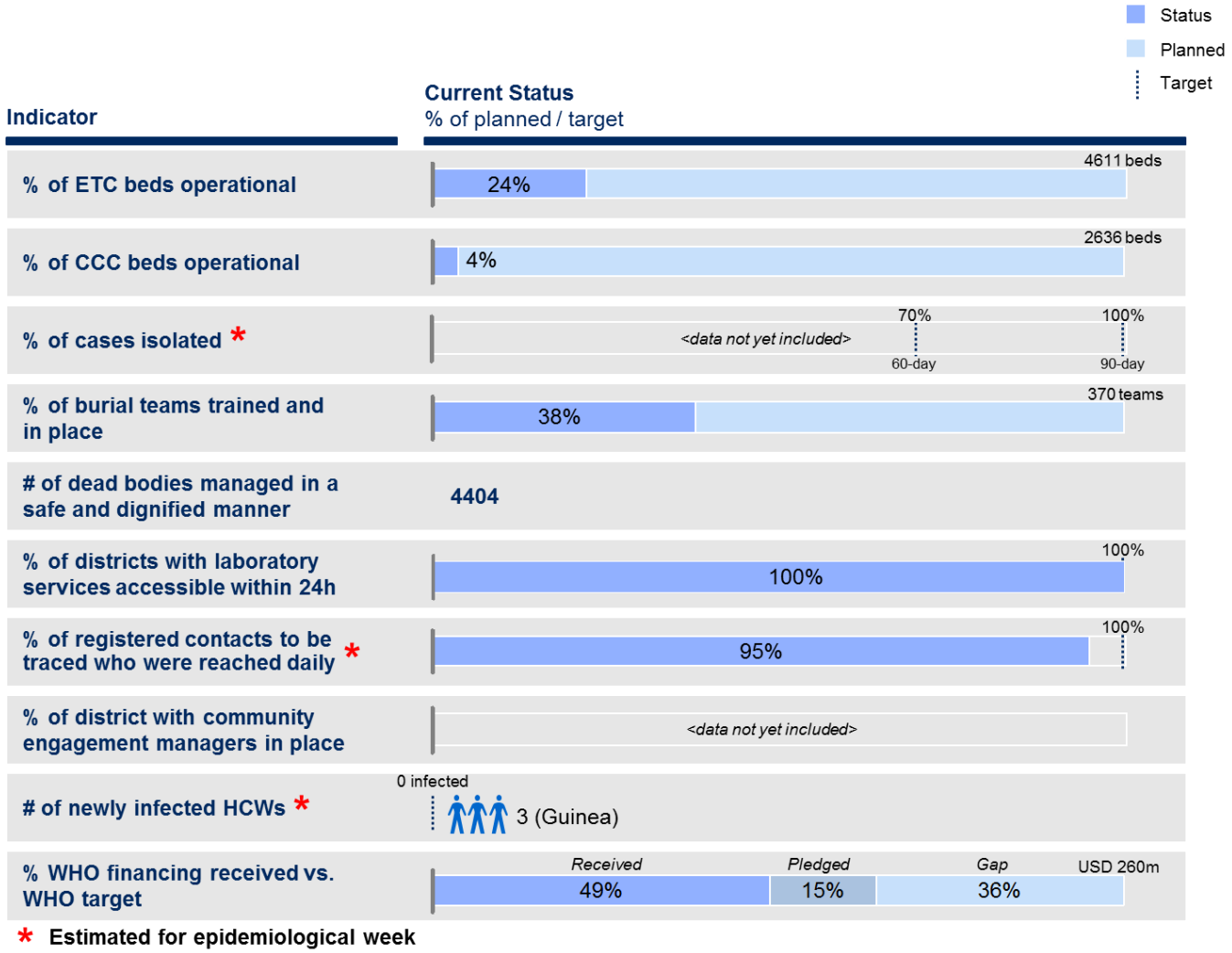
these systems will improve. Table 2 provides preliminary data on the response thus far. Tables 3 to 5 provide this information at country level.

Case management

Isolating EVD patients in Ebola Treatment Centres (ETCs) and Community Care Centres (CCCs) is critical to prevent further transmission. CCCs can provide an alternative to care when there is insufficient capacity in ETCs. The proportion of EVD cases isolated in each country is based on probable and confirmed cases hospitalized. This does not include patients who are reluctant to seek health care and are isolated at home.

A total of 91% of EVD patients who sought medical care between 27 October and 2 November were isolated. Seeking appropriate health care is an important way to prevent further disease transmission.

Table 2. Key Performance Indicators for the Ebola Response in the Three Most Affected Countries



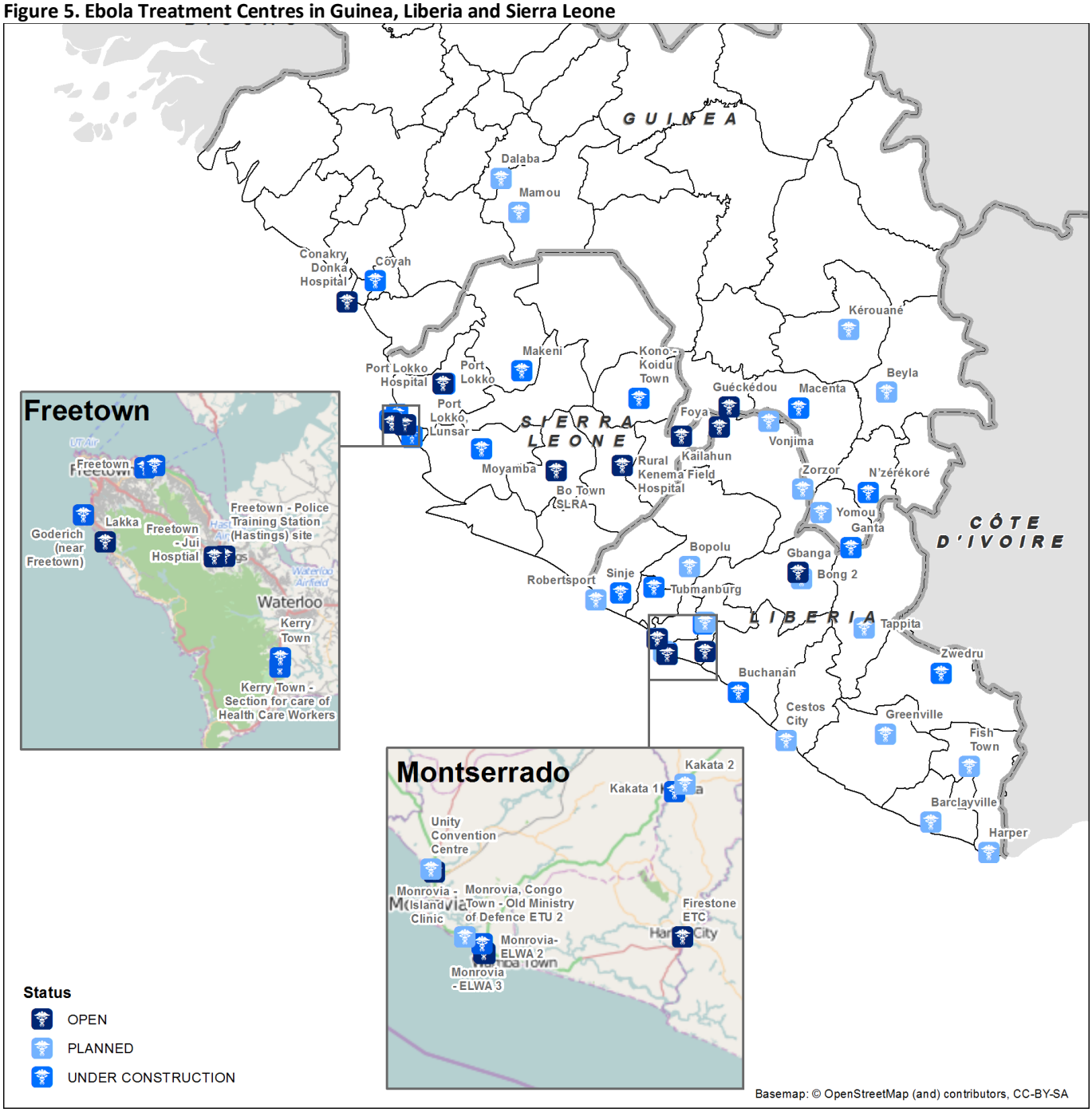
The information in tables 2 to 5 represents preliminary data from different time periods, which are specified in the text. Definitions for these indicators are found in Annex 2.

As of 11 November, 19 of 53 planned ETCs were open in the three intense-transmission countries. The proportion of ETC beds that are operational relates to those beds that are staffed by a health-care worker and ready to receive patients (figure 5). In Guinea, there are 160 beds in 2 ETCs. An additional 8 ETCs are either waiting for a partner to be identified to operate them, or are under construction. In Liberia, there are 613 beds in 8 ETCs. An additional 21 ETCs are planned. In Sierra Leone, there are 356 beds in 9 ETCs. In coming weeks, the construction of 9 additional ETCs will be complete, and they will begin accepting patients.

The number of planned ETC beds is subject to revision. The adjustment in the total number of planned ETC beds, from the 4707 reported last week to 4611, is due to a reduction in the planned number of beds in Liberia, and an increase in Sierra Leone. The planned ETCs allow complete geographic coverage and flexibility in scaling up services, according to need. The number of planned ETCs has not changed.

Of the 2636 CCC beds required, 4% (98) are open. The establishment and operation of CCCs are dependent on social mobilization and community engagement. WHO has been working with key partners, including the Centers for Disease Control and Prevention, UNICEF, Médecins Sans Frontières and others, to establish additional CCCs. Guidelines on the implementation of CCCs are being finalized.

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



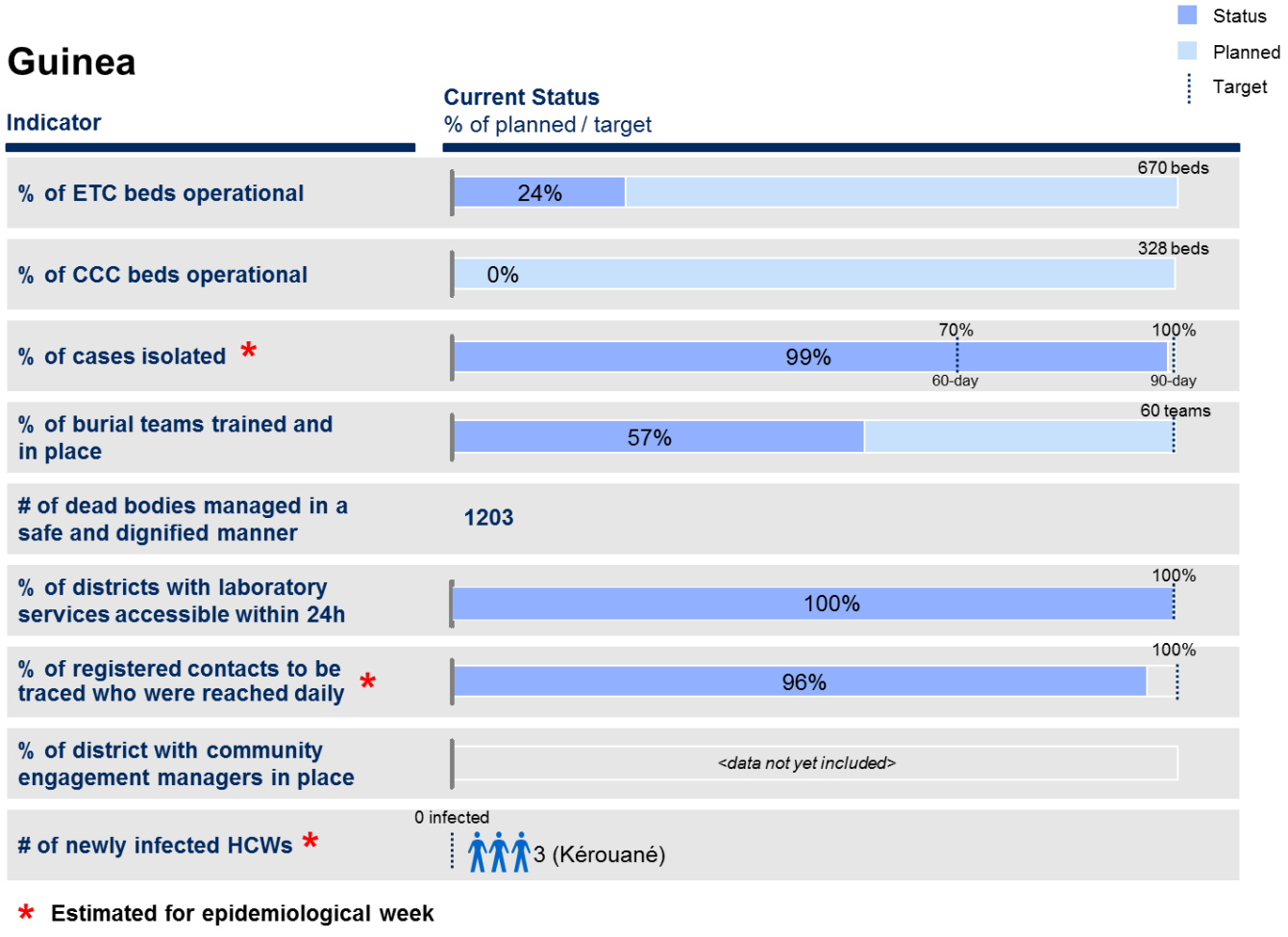
Safe and dignified burials

Conducting burials in a safe and dignified manner is an important component of the Ebola outbreak response. Efforts are being made to ensure burials are conducted safely and in a dignified manner in accordance with the religious beliefs of families. This includes training of burial teams in safe practices. Engaging with families is also critical, as a lack of engagement may create disincentives in reporting EVD deaths. Ongoing participation in safe burial practices is critical.

It is estimated that there is a need for 370 trained burial teams in the three countries with widespread and intense transmission. As of 18 October, only 140 (38%) of trained teams were on the ground, including 34 teams in Guinea, 50 teams in Liberia, and 56 in Sierra Leone. In Guinea, 57% (34 of 60) of planned burial teams were active. In Sierra Leone 56% (50 of 90) of teams were active, while 25% of teams were active in Liberia (55 out of 220).

These figures represent burial teams supported by the International Federation of Red Cross and Red Crescent Societies (IFRC), ministries of health and international non-governmental organizations. In Liberia, there have been 2292 burials managed in a safe and dignified manner. In Sierra Leone there have been 909 and 1203 in Guinea. These have all been managed by IFRC, the lead agency managing burials and cremations. The number of burials conducted by the IFRC may include EVD-suspected deaths that were later laboratory-confirmed as negative for the disease. Efforts are continuing to capture burials managed by other organizations to improve the quality of the data.

Table 3. Key Performance Indicators for the Ebola Response in Guinea



* **Estimated for epidemiological week**

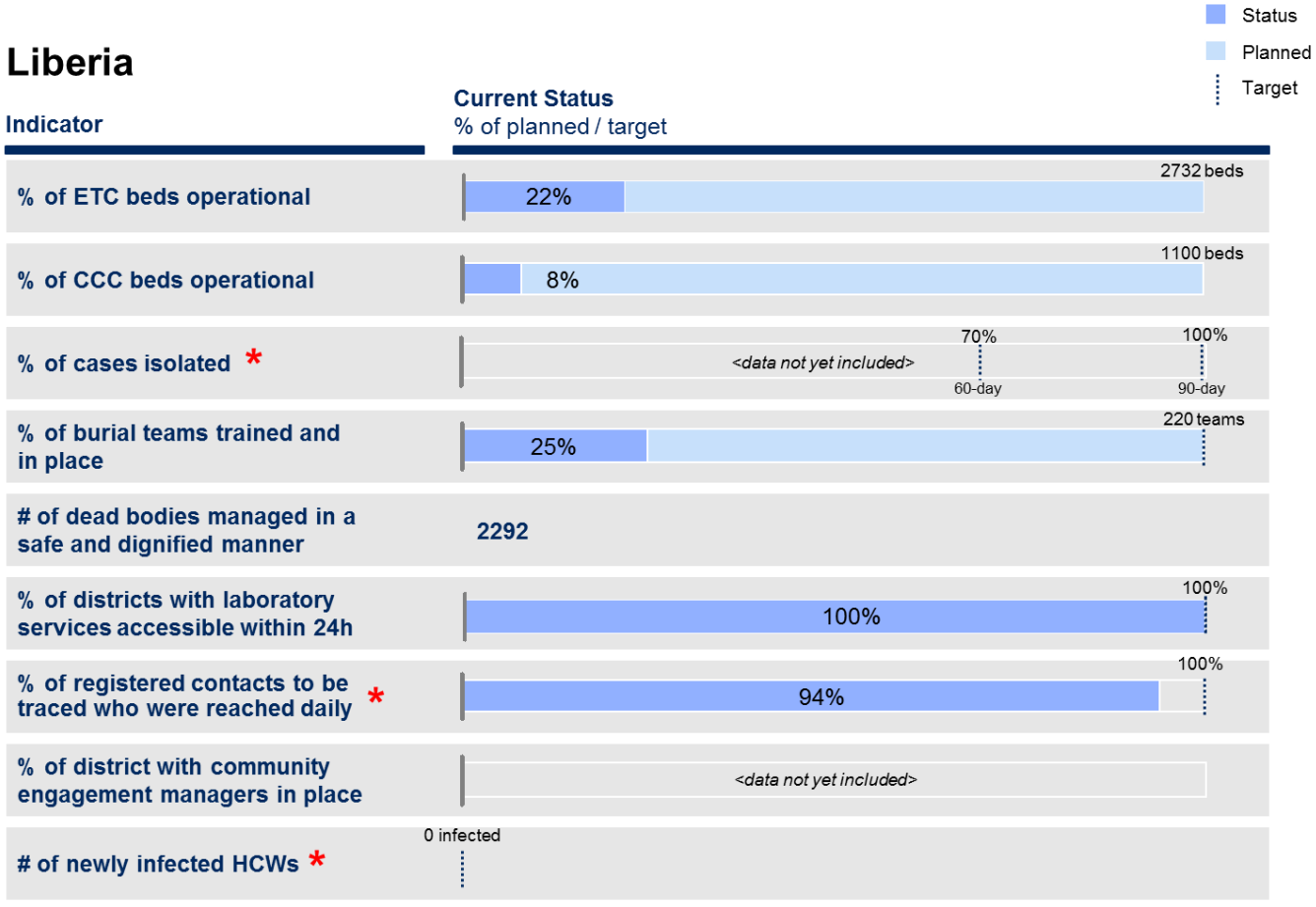
Case confirmation and surveillance

A critical aspect of the response to the Ebola outbreak is the prompt and accurate diagnosis of cases. All Ebola-affected districts are reported to have laboratory support (figure 6). Thirteen laboratories have the capacity to confirm Ebola cases – 5 in each of Liberia and Sierra Leone, and 3 in Guinea. These laboratories serve 24 affected districts in Guinea, 15 in Liberia and 14 in Sierra Leone.

The increase in the proportion of districts with access to laboratory support, compared with the 62% reported in the Situation Report of 5 November, reflects an updated definition of accessibility. The definition now reflects laboratory accessibility within 24 hours of travel time. At present, samples from every affected district can be sent to a laboratory within 24 hours by road. Affected districts include all those that have had a confirmed or probable EVD case in the recent outbreak. Between 1150 and 1170 samples are tested daily in laboratories in the three countries. The maximum testing capacity for each laboratory ranges from 50 to 300 samples per day.

Effective contact tracing ensures registered contacts of confirmed Ebola cases are identified and visited daily to monitor the onset of symptoms during the 21-day incubation period. Contacts presenting symptoms should be promptly isolated to prevent further disease transmission.

Table 4. Key Performance Indicators for the Ebola Response in Liberia



* **Estimated for epidemiological week**

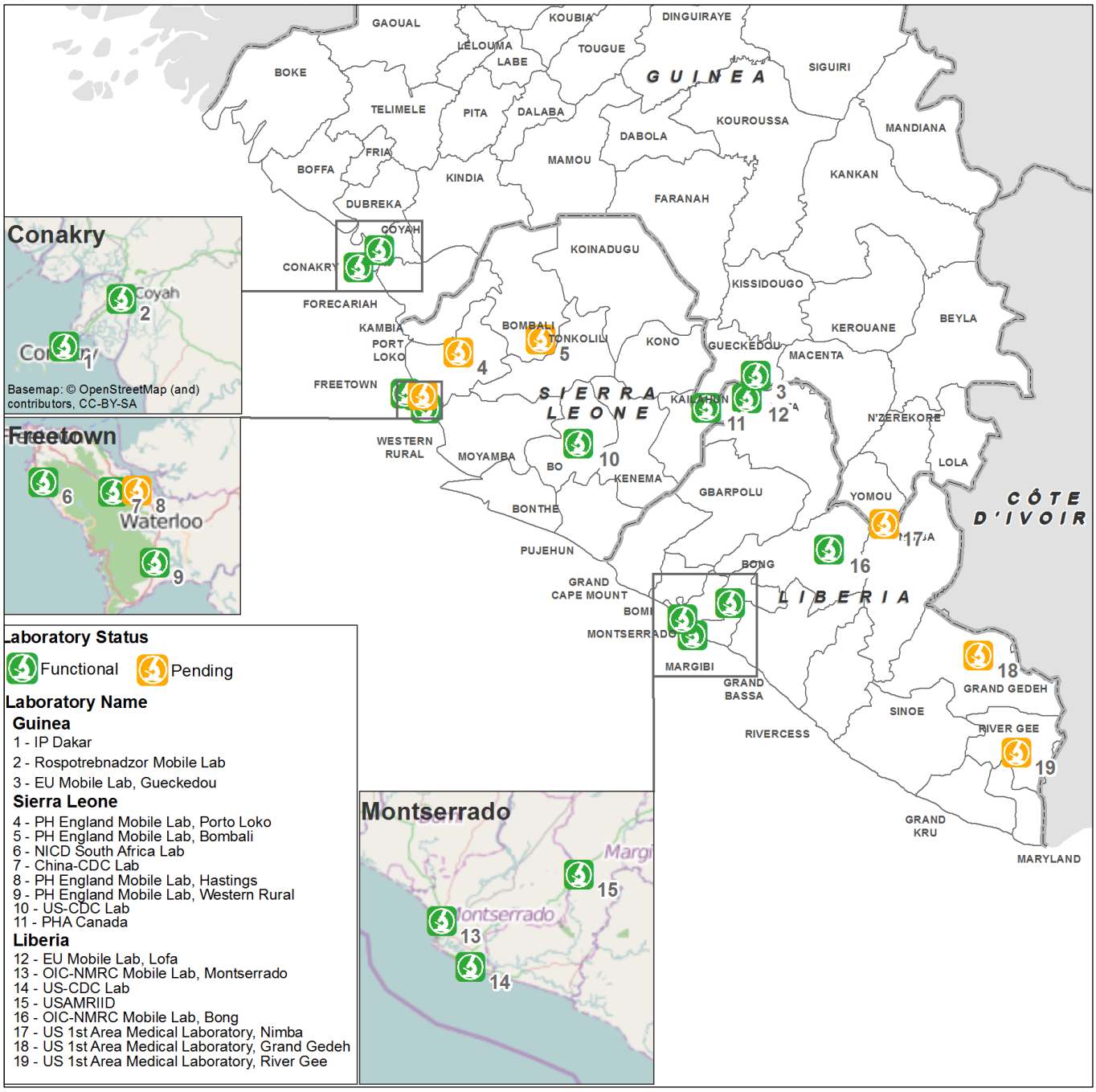
Between 3 and 8 November, 5301 new contacts were identified in Guinea, Liberia and Sierra Leone, compared with 4067 new contacts traced in the previous week. A total of 95% (124 214 of 130 140) of required daily contact visits were conducted. However, the proportion of contacts reached was lower in many districts. Each district is reported to have at least one contact-tracing team in place. On average, only 10 contacts were listed per case in the three countries in the past week. The low average number of contacts listed per case suggests that the estimate of 95% gives an unduly favourable view of the success of contact tracing. Active case finding teams are

being mobilized as a complementary case detection strategy.

Social mobilization and community engagement

UNICEF is the lead agency in social mobilization during this outbreak. A joint WHO-UNICEF team has visited the three countries to review and assist them with their social mobilization plans. Data are not yet available on community engagement indicators.

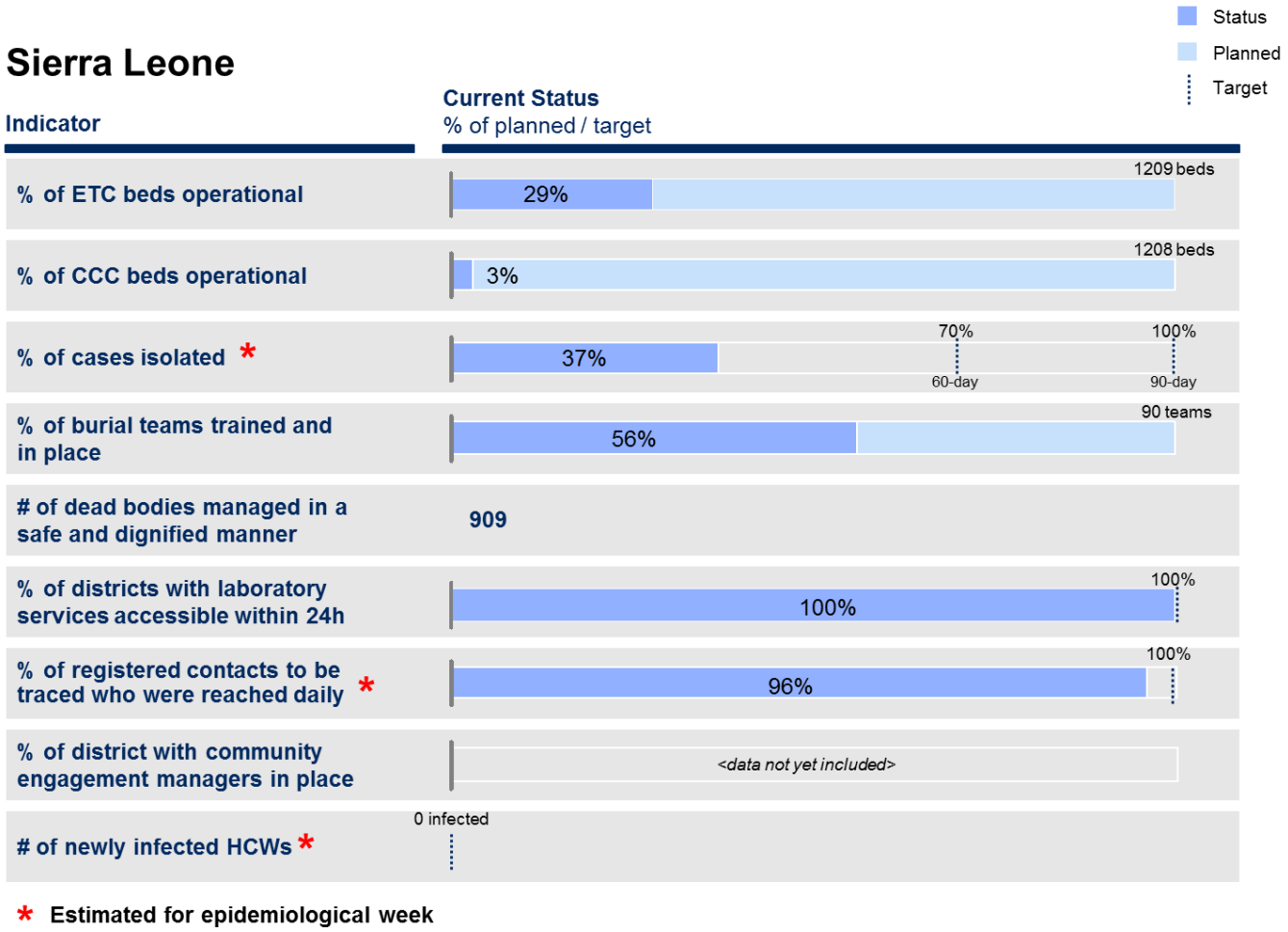
Figure 6. Status of laboratories deployed in the affected countries to support the Ebola outbreak response



Budget

WHO requires USD 260 million to meet the objectives of its response to the Ebola outbreak. As of 24 October, WHO has received 49% of these funds, while 15% of the funds required have been pledged. This leaves a gap of 36%. WHO continues to appeal to Member States to provide funding and other resources to assist in containing the Ebola outbreak.

Table 5. Key Performance Indicators for the Ebola Response in Sierra Leone



* Estimated for epidemiological week

Health-care workers

A total of 564 health-care workers (HCWs) are known to have been infected with EVD up to the end of 10 November, 320 of whom have died (table 6). This includes a HCW infected in Spain while treating an EVD-positive patient, 3 HCWs in the US (including a HCW infected in Guinea, and 2 HCWs infected during the care of a patient in Texas). In the week to 9 November, 3 HCWs were infected in the Kerouane district in Guinea.

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

Country	Cases	Deaths
Guinea	92	51*
Liberia	329	162
Sierra Leone	128	102
Total	549	315

*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 is up to 7 November.*

WHO is undertaking extensive investigations to determine the source of exposure in each case. Early indications are that a substantial proportion of infections occurred outside the context of Ebola treatment and care centres. This reinforces the need to adhere to infection prevention and control measures at all health-care facilities, not just Ebola-related facilities. WHO has conducted a review of personal protective equipment (PPE) guidelines for HCWs providing direct care to patients, and has updated its guidelines in the context of the current Ebola outbreak. Comprehensive mandatory training in the use of PPE, and mentoring for all users before engaging in clinical care, is considered fundamental for the protection of HCWs and patients. WHO has moved more than 1

million sets of PPE to Guinea, Liberia and Sierra Leone, and continues to work with ministries of health and other partners to procure and distribute PPE where it is most needed.

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 4 confirmed and probable cases, including 4 deaths, have now been reported in Mali (figure 1). The most recent cases are in Bamako. They are not related to the country's first EVD case, who died in Kayes on 24 October.

In Spain, 22 days have passed since the HCW infected while caring for an Ebola patient in Madrid tested negative twice and was discharged from hospital. Spain will therefore be declared free of EVD 42 days after the date of the second negative test if no new cases are reported. All 83 contacts of the HCW have completed 21-day follow-up.

In the United States of America, there have been 4 cases and 1 death. One HCW in New York and 2 HCWs in Texas have tested negative for Ebola 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, Spain and the United States of America

Country	Cumulative cases					Contact tracing			
	Confirmed	Probable	Suspect	Deaths	Health-care workers	Listed contacts to be followed	Contacts completing 21 days of follow up	Date of the second negative test or death	Number of days since second negative test
Mali	2	2	0	4	25%	67 Kayes 28 Bamako	41	11/11/2014	0
Spain	1	0	0	0	100%	0	83	21/10/2014	22
United States of America	4	0	0	1	75%	0	177	11/11/2014*	0

**Includes two HCWs infected in the USA while treating an Ebola patient from Liberia, and a HCW infected in Guinea. 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.*

In Nigeria, there were 20 cases and 8 deaths. In Senegal, there was 1 case and no deaths. However, following a successful response in both countries, the outbreaks of EVD in Senegal and Nigeria were declared over on 17 October and 19 October 2014, respectively. A national EVD outbreak is considered to be over when 42 days (double the 21-day incubation period of the Ebola virus) has elapsed since the last patient in isolation became laboratory negative for EVD.

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 before they develop into large outbreaks.

The success of Nigeria and Senegal in halting the transmission of EVD highlights the critical importance of preparedness. Important 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.

Fifteen countries that neighbour countries with widespread and intense transmission, or that otherwise have strong trade and travel ties with countries with widespread and intense transmission, have been prioritized for technical assistance on preparedness from specialist WHO teams and partners. These countries are: Benin, Burkina Faso, Cameroon, Central African Republic, Cote D'Ivoire, Democratic Republic of Congo, Gambia, Ghana, Guinea Bissau, Mali, Mauritania, Nigeria, Senegal, South Sudan, and Togo.

WHO and partners are supporting these countries to help increase their level of preparedness. A team was deployed to Mali and Cote d'Ivoire in October. This week, teams have been deployed to Cameroon, Ghana, Guinea Bissau and Mauritania. In the next week, it is expected that teams will visit Benin, Burkina Faso, Gambia and Senegal.

WHO has developed the *Consolidated Ebola Virus Disease Preparedness Checklist* to help countries ensure they are ready to cope, should there be a case or cases of EVD. The checklist, along with other tools such as simulation exercises, help countries to assess and test their level of readiness. They can be used as the basis to identify action to be taken by countries and the international community to close potentially existing gaps. The consolidated checklist identifies 10 key components and tasks for countries and the international community that should be completed within 30, 60 and 90 days from the date of issuing the list. This includes overall coordination, rapid response, public awareness and community engagement, infection prevention and control, case management of ETCs, safe burials, epidemiological surveillance, contact tracing, laboratory capacity, and capacity building for Points of Entry.

WHO, the United Nations and other partners are accelerating the deployment of international preparedness strengthening teams, to help countries build upon their existing work and planning. At the end of each mission, technical experts remain on the ground to support and maximize capacity-building efforts to prepare for public health emergencies, including EVD.

ANNEX 1: CATEGORIES USED TO CLASSIFY EBOLA CASES

Ebola cases are classified as suspected, probable, or confirmed depending on whether they meet certain criteria (table 8).

Table 8: Ebola case-classification criteria

Classification	Criteria
Suspected	Any person, alive or dead, who has (or had) sudden onset of high fever and had contact with a suspected, probable or confirmed Ebola 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.
Probable	Any suspected case evaluated by a clinician OR any person who died from 'suspected' Ebola and had an epidemiological link to a confirmed case but was not tested and did not have laboratory confirmation of the disease.
Confirmed	A probable or suspected case is classified as confirmed when a sample from that person tests positive for Ebola virus 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	Denominator
% of ETC beds operational	# of ETC beds operational	# of ETC beds planned (UNMEER)
% of CCC beds operational	# of CCC beds operational	# of CCC beds planned (UNMEER)
% of cases isolated *	# probable and confirmed cases isolated following hospitalization	# of probable and confirmed cases with hospitalization information
% of burial teams trained and in place	# of burial teams trained and in place	# of planned burial teams (UNMEER)
# of dead bodies managed in a safe and dignified manner **	# of cumulative dead bodies managed in a safe and dignified manner (IFRC)	
% of districts with laboratory services accessible within 24h	# of EVD-affected districts within 24 hours of travel of a laboratory	# of EVD-affected districts
% of registered contacts to be traced who were reached daily *	# of registered contacts reached daily	# of contacts currently registered
% of districts with community engagement managers in place	# of districts with community engagement managers in place	# of EVD-affected districts
# of newly infected HCWs *	# of newly infected HCWs	
% WHO financing received vs. WHO target	Received and pledged (USD millions)	WHO target (USD millions)

* Estimated for epidemiological week ** Preferred indicator: % of dead bodies managed in a safe and dignified manner

ANNEX 3: EBOLA OUTBREAK IN DEMOCRATIC REPUBLIC OF THE CONGO

As at 9 November there have been 66 cases (38 confirmed, 28 probable) of EVD reported in the Democratic Republic of the Congo, including 8 among HCWs. In total, 49 deaths have been reported, including 8 among HCWs. No new reported contacts are being followed. The test results of 1 suspected case are not yet known.

Thirty-one days have passed since the last case tested negative twice and was discharged from hospital. Once 42 days have passed, the country can be declared free of Ebola. This outbreak is unrelated to that affecting Guinea, Liberia, Mali, Nigeria, Senegal, Sierra Leone and the United States of America.