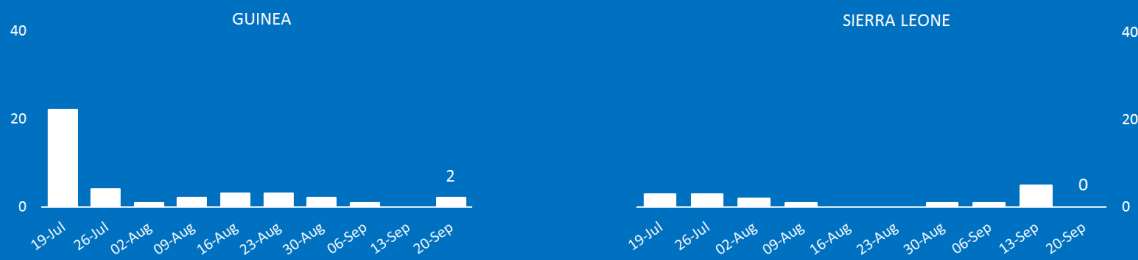




Total confirmed cases (by week, 2015)

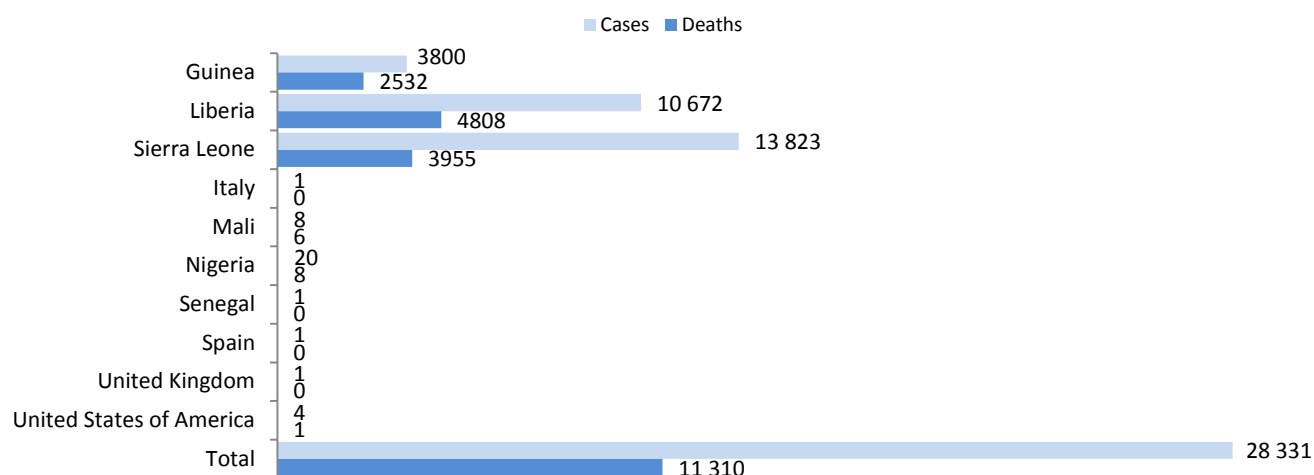


SUMMARY

- There were 2 confirmed cases of Ebola virus disease (EVD) reported in the week to 20 September, both of which were in Guinea. Case incidence has remained below 10 cases per week since the end of July this year. 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. Improvements to rapid and accurate case investigation and contact tracing, rapid isolation and treatment, and effective engagement with affected communities have all played a crucial part in reducing case incidence to its current low level. A refined phase-3 response¹ coordinated by the Interagency Collaboration on Ebola² will build on these existing measures to drive case incidence to zero, and ensure a sustained end to EVD transmission. Enhanced surveillance 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, improved testing and counselling capacity as part of a comprehensive package to safeguard the welfare of survivors, and the increased use of innovative technologies—from vaccines to rapid diagnostic tests—are central to the phase-3 response framework. Accordingly, an increased emphasis will be placed on the monitoring and evaluation of these additional phase-3 measures in the coming weeks.
- After recording 14 consecutive days with zero confirmed cases, two new confirmed cases were reported from Guinea during the week ending 20 September: a 10-year-old girl who died after moving from the Ratoma area of Conakry to Forecariah, and a 24-year-old woman who was identified as EVD-positive in the Dixinn area of Conakry. Neither case was a registered contact, although both cases have a strong epidemiological link to a probable case thought to have died from EVD at the end of August. Investigations incorporating genetic sequencing of Ebola virus from both confirmed cases suggest they are part of the Ratoma chain of transmission—the only chain of transmission known to be currently active (past 21 days) in Guinea.
- No new confirmed cases were reported from Sierra Leone in the week to 20 September. Over 700 contacts have been identified in association with the previous week's reported case from Bombali: a 16 year-old girl identified as EVD-positive after post-mortem testing. Investigations into the origin of her infection have not yet concluded, but preliminary findings suggest that a survivor may have been the source.
- Robust surveillance measures are essential to ensure the rapid detection of any reintroduction or re-emergence of EVD in currently unaffected areas. A total of 719 samples were tested by 8 operational laboratories in Guinea in the week to 20 September. Analyses of the geographical distribution of samples collected indicate that 21 of 34 Guinean prefectures did not collect any samples from either live or dead suspected cases of EVD over the 1-week period. Over the same period, 1887 samples were collected from 100% (14 of 14) of districts in Sierra Leone and tested by 9 operational laboratories. In Liberia, 1435 samples were collected from 100% (15 of 15) of counties in the week to 20 September, although the capacity of the country's 3 operational laboratories is not currently sufficient to rapidly test all samples. Surveillance in the three countries will be enhanced in line with the phase-3 response framework.

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

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

Figure 1: Confirmed, probable, and suspected EVD cases worldwide (data up to 20 September 2015)


COUNTRIES WITH WIDESPREAD AND INTENSE TRANSMISSION

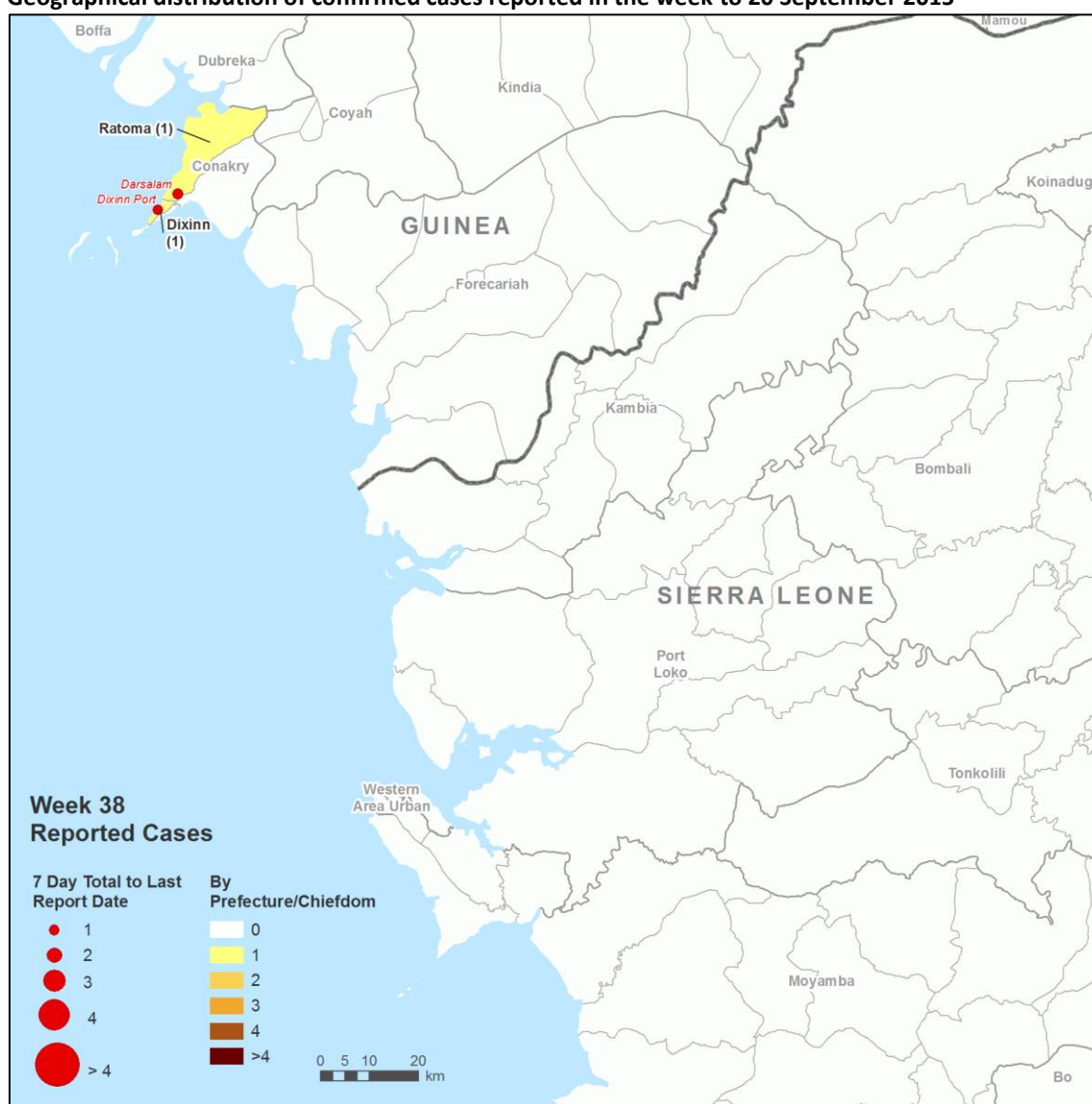
Table 1: Confirmed, probable, and suspected cases in Guinea, Liberia, and Sierra Leone

| Country | Case definition | Cumulative cases | Cases in past 21 days | Cumulative deaths |
|--------------|-----------------|------------------|-----------------------|-------------------|
| Guinea | Confirmed | 3340 | 3 | 2079 |
| | Probable | 453 | * | 453 |
| | Suspected | 7 | * | ‡ |
| | Total | 3800 | 3 | 2532 |
| Liberia** | Confirmed | 3151 | - | ‡ |
| | Probable | 1879 | - | ‡ |
| | Suspected | 5636 | - | ‡ |
| | Total | 10 666 | - | 4806 |
| | Confirmed | 6 | 0 | 2 |
| | Probable | * | * | ‡ |
| | Suspected | ‡ | * | ‡ |
| | Total | 6 | 0 | 2 |
| Sierra Leone | Confirmed | 8704 | 6 | 3589 |
| | Probable | 287 | * | 208 |
| | Suspected | 4832 | * | 158 |
| | Total | 13 823 | 6 | 3955 |
| Total | Confirmed | 15 201 | 9 | ‡ |
| | Probable | 2619 | * | ‡ |
| | Suspected | 10 475 | * | ‡ |
| | Total | 28 295 | 9 | 11 295 |

Data are based on official information reported by ministries of health. These numbers are subject to change due to ongoing reclassification, retrospective investigation and availability of laboratory results. *Not reported due to the high proportion of probable and suspected cases that are reclassified. ‡Data not available. **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 28 295 reported confirmed, probable, and suspected cases³ of EVD in Guinea, Liberia, and Sierra Leone (figure 1, table 1) up to 20 September, with 11 295 reported deaths (this total includes reported deaths among probable and suspected cases, although outcomes for many cases are unknown). Two new cases, both from Guinea, were reported in the week to 20 September.
- 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 20 September. 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 20 September 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.

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

Table 2: Cumulative number of confirmed 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 | 1594 (29) | 1741 (32) | 532 (11) | 1899 (41) | 860 (55) |
| Liberia [§] | 1911 (96) | 1838 (93) | 561 (33) | 2060 (121) | 703 (132) |
| Sierra Leone | 4823 (169) | 5118 (176) | 1992 (82) | 5636 (218) | 2140 (290) |

Population figures are based on estimates from the United Nations Department of Economic and Social Affairs.⁴ 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. §Data are until 9 May 2015.

Table 3: Cases and contacts by district/prefecture over the past 3 weeks

| | Prefecture/ District | Week | | | | | | | | | Week 38 | Contacts under follow up* |
|-----------------|-------------------------|------|----|-------------------|--------------------|-------------------|---------------------|-------------------|-------------------|-------------------|------------|---------------------------------|
| | | 36 | 37 | 14 Sept Mon | 15 Sept Tues | 16 Sept Wed | 17 Sept Thurs | 18 Sept Fri | 19 Sept Sat | 20 Sept Sun | | |
| Guinea | Conakry | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 2 | 231 |
| | Forecariah | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 306 |
| Subtotal | | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 2 | 537 |
| Sierra Leone | Bombali | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 772 |
| | Kambia | 1 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 |
| Subtotal | | 1 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 786 |
| Total | | 2 | 5 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 2 | 1323 |

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 20 September 2015 for Guinea and Sierra Leone.

GUINEA

- Key performance indicators for the EVD response in Guinea are shown in table 6.
- After 14 consecutive days with zero confirmed cases, two new confirmed cases were reported from the Guinean capital Conakry during the week ending 20 September (table 3, table 4, figure 2, figure 3). Neither case was a registered contact. The first case is a 10-year old girl and sister of a probable case, a 19-year-old woman who is thought to have died of EVD on 29 August. The 10-year-old developed symptoms at home in the Ratoma area of Conakry and attended a local private clinic with her family. After returning home but showing no signs of improvement, she was taken by her family to the sub-prefecture of Kalia, Forecariah, on 13 September to seek further treatment. She died on 15 September, received a safe burial, and was subsequently identified as EVD-positive by post-mortem swab on 16 September. The second case is the 24-year-old friend of the probable case. She was identified as EVD-positive on 19 September in the Dixinn area of Conakry and admitted to an Ebola treatment centre, where she is receiving treatment. Epidemiological investigations incorporating genetic sequencing of Ebola virus from both confirmed cases suggest that they are part of the Ratoma chain of transmission—the only chain of transmission known to be currently active (past 21 days) in Guinea. Over 500 contacts (table 3) have been identified in Conakry and Forecariah in association with the two confirmed and one probable case. There is considered to be a substantial risk of further cases among contacts.
- 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.

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

- 537 contacts were under follow-up on 20 September in Guinea in two adjacent prefectures, Conakry (231 contacts) and Forecariah (306 contacts: all related to the movement of the 10-year old girl identified as an EVD-positive community death in the week ending 20 September).
- There were 4 (0.8%) unsafe burials reported in Guinea out of 520 community deaths during the week to 20 September, compared with 1 (0.2%) unsafe burials out of 587 community deaths during the previous week.
- Including both initial and repeat testing, a total of 719 laboratory samples were tested in the week to 20 September. Most tests (87% in the week to 20 September) 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 (21 of 34) of Guinean prefectures during the week to 20 September (figure 7, figure 8). Most of the 21 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 20 September.

Table 4: Location and epidemiological status of confirmed cases reported in the 3 weeks to 20 September 2015

| Country | Prefecture/ District | Sub-prefecture/ Chiefdom | Week 36 | Week 37 | Cases | Week 38 (14 - 20 September 2015) | | | | Date of last confirmed case |
|--------------|-------------------------|-----------------------------|------------------------|--------------------|-------|----------------------------------|-----------|--|--|-----------------------------|
| | | | (31 Aug - 6 Sept 2015) | (7 - 13 Sept 2015) | | On contact list | Epi-link* | Unknown source of infection [‡] | Confirmed community death [§] | |
| Guinea | Conakry | Ratoma | 1 | 0 | 1 | | 1 | | 1 | 16/09/2015 |
| | | Dixinn | 0 | 0 | 1 | | 1 | | | 19/09/2015 |
| Subtotal | | | 1 | 0 | 2 | 0 | 2 | 0 | 1 | |
| Sierra Leone | Bombali | Bombali Seborá | 0 | 1 | | | | | | 13/09/2015 |
| | Kambia | Tonko Limba | 1 | 4 | | | | | | 09/09/2015 |
| Subtotal | | | 1 | 5 | 0 | 0 | 0 | 0 | 0 | |
| All | | | 2 | 5 | 2 | 0 | 2 | 0 | 1 | |

Sub-prefectures/chiefdoms that reported one or more confirmed cases in the 7 days to 20 September 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. [‡]Includes cases under epidemiological investigation. [§]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 20 September. Over 700 contacts have been identified in association with the previous week's reported case from Bombali: a 16 year-old girl identified as EVD-positive after post-mortem testing. Investigations into the origin of her infection have not yet concluded, but preliminary findings suggest that transmission most likely occurred as a result of re-emergence of Ebola virus from a survivor.
- 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.
- As at 20 September a total of 786 contacts were under follow-up in Sierra Leone: 772 in Bombali and 14 in Kambia.
- 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 20 September.
- Laboratory indicators continue to reflect a heightened degree of vigilance, with 1887 new samples from all 14 Sierra Leonean districts tested in the week to 20 September (figure 7, figure 8). Most tests (77% in the week to 20 September) are of post-mortem swabs taken to rule out EVD as the cause of death (figure 7, figure 8).

- In the week to 20 September there were 232 alerts of people who showed any symptom compatible with EVD, of which 229 (99%) were responded to within the same day. During the same period, there were 1708 notifications of burials, of which 1648 (96%) were responded to within the same day.
- Locations of the 8 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 [‡] |
| 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. [‡]Data as of 17 February 2015.

Table 6: Key response performance indicators for Guinea

| Indicator | Target | Indicator | Target |
|---|------------------------|---|------------------------|
| Cases and deaths | 13 July – 20 September | Hospitalization | Sept - Aug |
| Number of confirmed cases | Zero | Time between symptom onset and hospitalization (days) [‡] | <2 days |
| Number of confirmed deaths | Zero | Outcome of treatment | Sept - July |
| Proportion of EVD-positive reported community deaths | Zero | Case fatality rate (among hospitalized cases) [#] | <40% |
| Diagnostic services | 13 July – 20 September | IPC and safety | 13 July – 20 September |
| Number of samples tested and the percent of positive EVD results* | 0.6% | Number of newly infected health workers | Zero |
| Contact tracing | 13 July – 20 September | Safe and dignified burials | 13 July – 20 September |
| Percent of new confirmed cases from registered contacts | 100% | Number of unsafe burials and the reported number of community deaths | Zero |
| Community engagement | 13 July – 20 September | Community engagement | 13 July – 20 September |
| Number of districts with at least one security incident or other form of refusal to cooperate | Zero | Number of districts with at least one security incident or other form of refusal to cooperate | Zero |

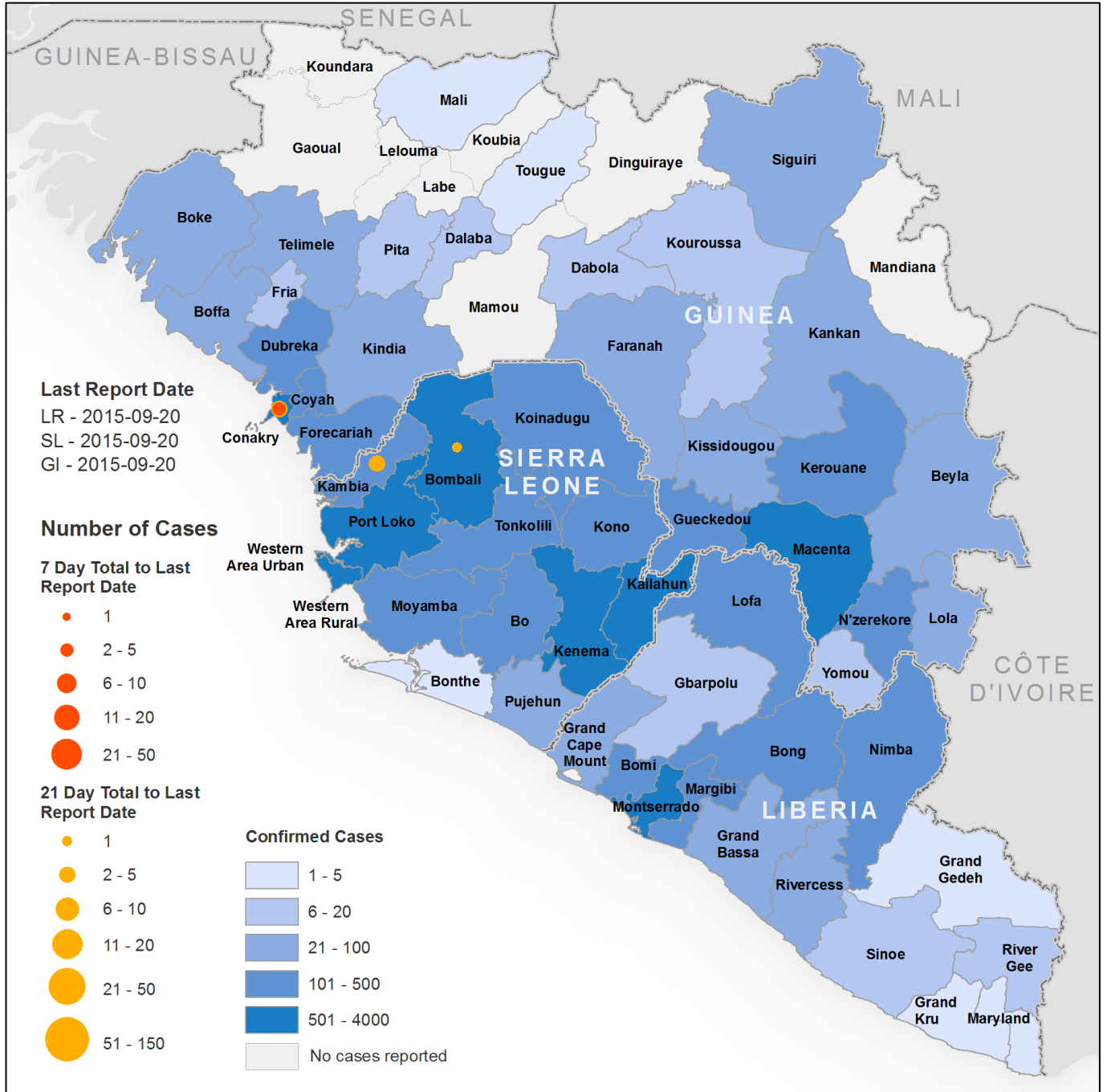
For definitions of key performance indicators see Annex 2. Data are given for 7-day periods. *Includes repeat samples. [‡]Data missing for 0–3% of cases. [#]Outcome data missing for 0–3% of hospitalized confirmed cases.

Table 7: Key response performance indicators for Sierra Leone

| Indicator | Target | Indicator | Target |
|---|------------------------|---|------------------------|
| Cases and deaths | 13 July – 20 September | Hospitalization | Sept - July |
| Number of confirmed cases | Zero | Time between symptom onset and hospitalization (days) [‡] | <2 days |
| Number of confirmed deaths | Zero | Outcome of treatment | Aug - May |
| Proportion of EVD-positive reported community deaths [§] | Zero | Case fatality rate (among hospitalized cases) [#] | <40% |
| Diagnostic services | 13 July – 20 September | IPC and safety | 13 July – 20 September |
| Number of samples tested and the percent of positive EVD results [§] | 1887 | Number of newly infected health workers | Zero |
| Contact tracing | 13 July – 20 September | Safe and dignified burials | 13 July – 20 September |
| Percent of new confirmed cases from registered contacts | 100% | Number of reports of unsafe burials | Zero |
| Community engagement | 8 July – 9 September | Community engagement | 8 July – 9 September |
| Number of districts with at least one security incident or other form of refusal to cooperate | Zero | 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. [§]Laboratory data missing for 14 July. [‡]Data missing for 7–14% of cases. [#]Outcome data missing for 0–77% of hospitalized confirmed cases. An outcome is known for only 6 hospitalized, confirmed cases in each April and May.

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

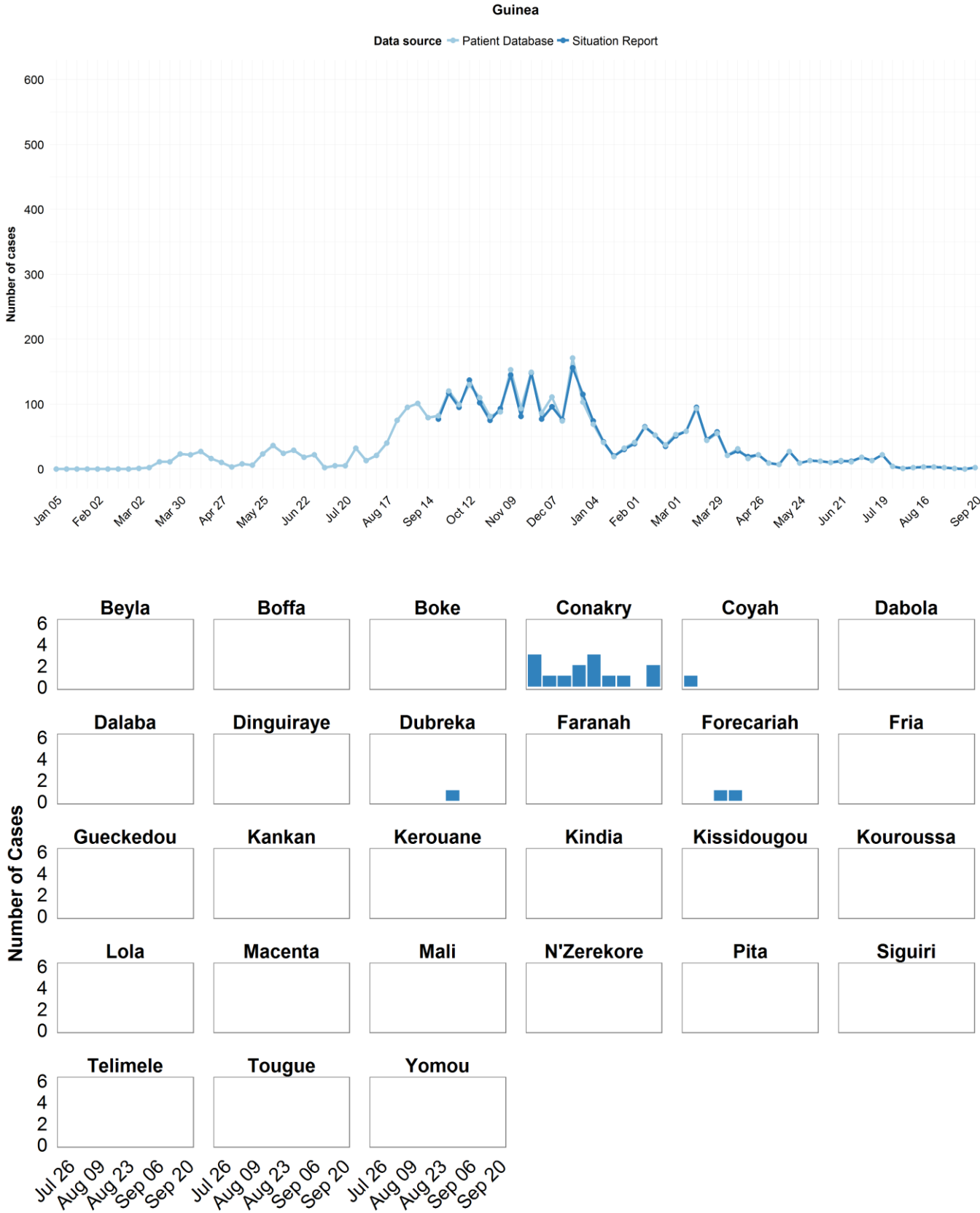


Figure 5: Confirmed weekly Ebola virus disease cases reported nationally and by district from Sierra Leone

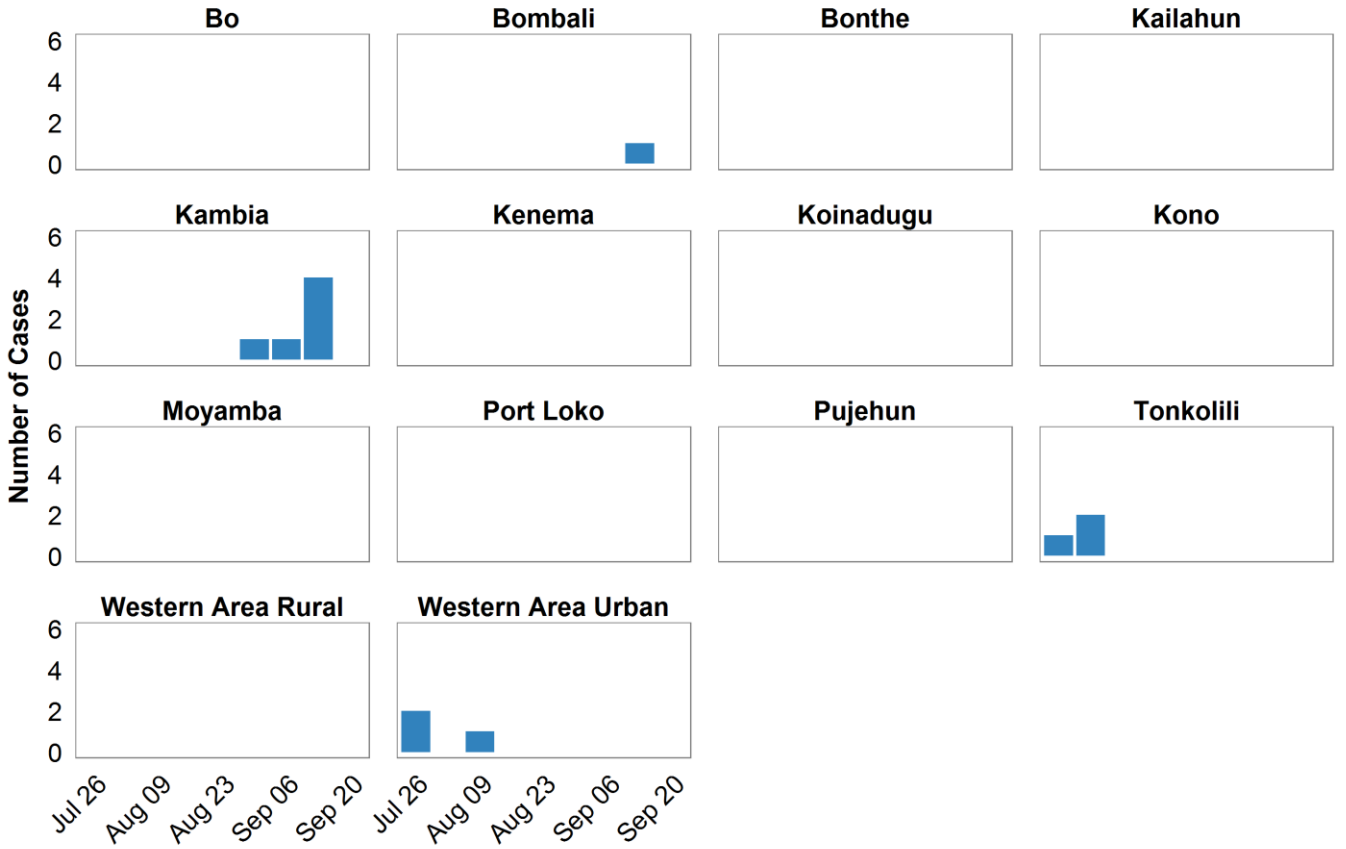
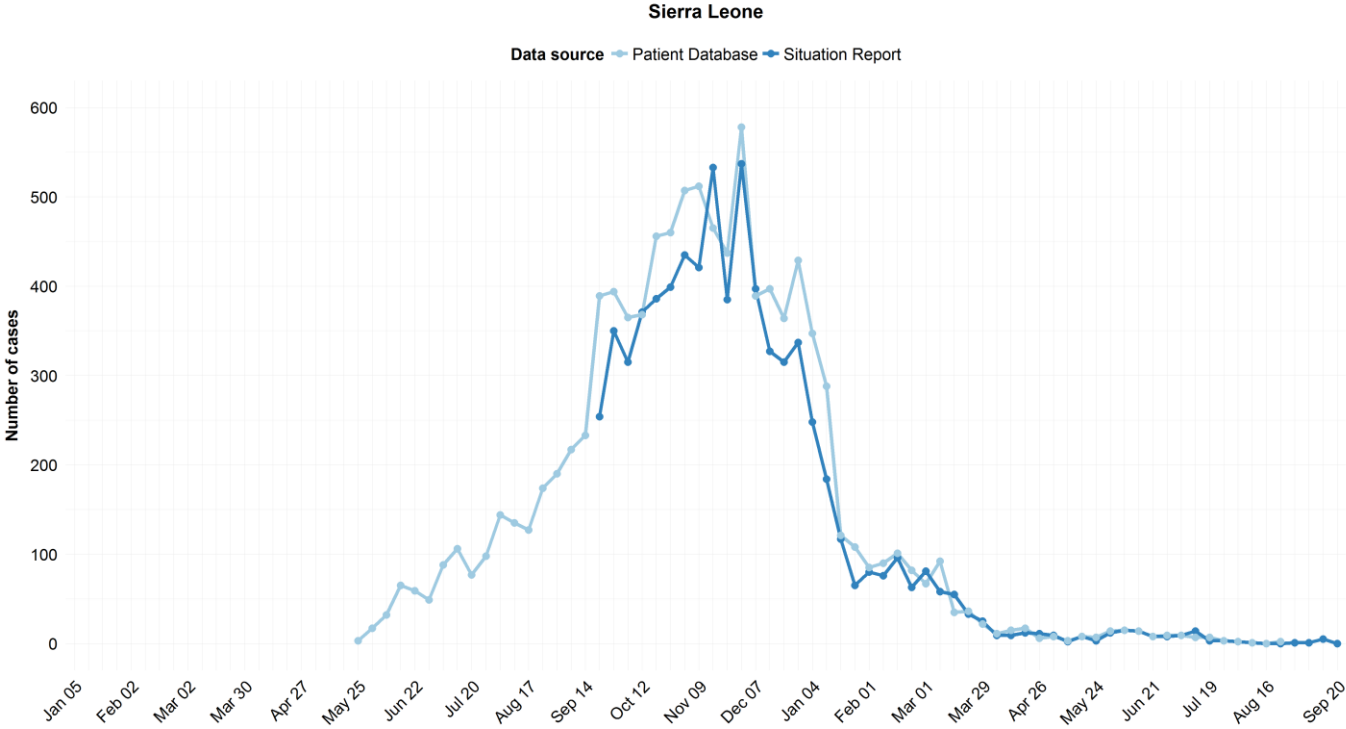
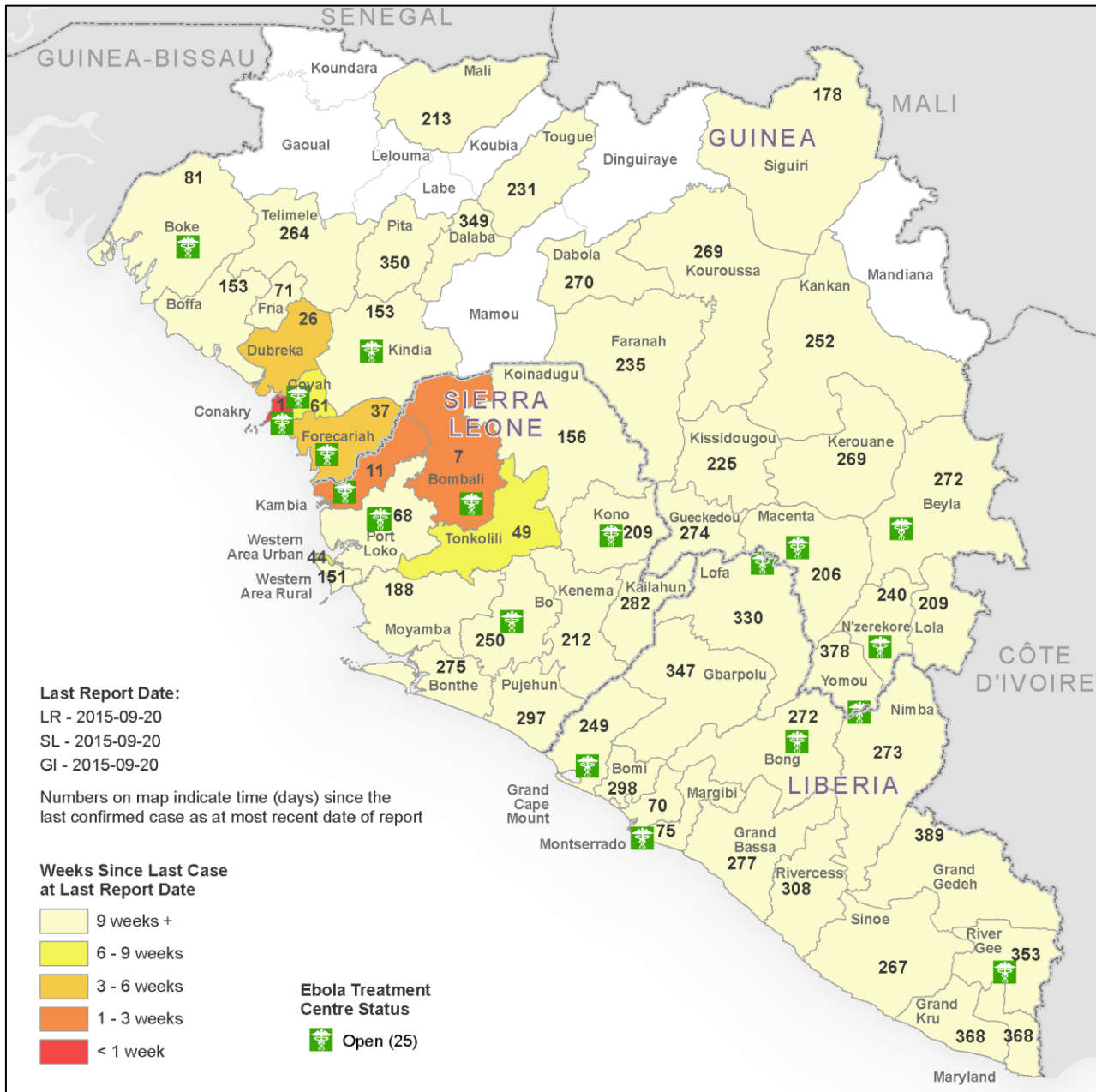


Figure 6: Location of Ebola treatment centres and time since last confirmed case in Guinea, Liberia, and Sierra Leone

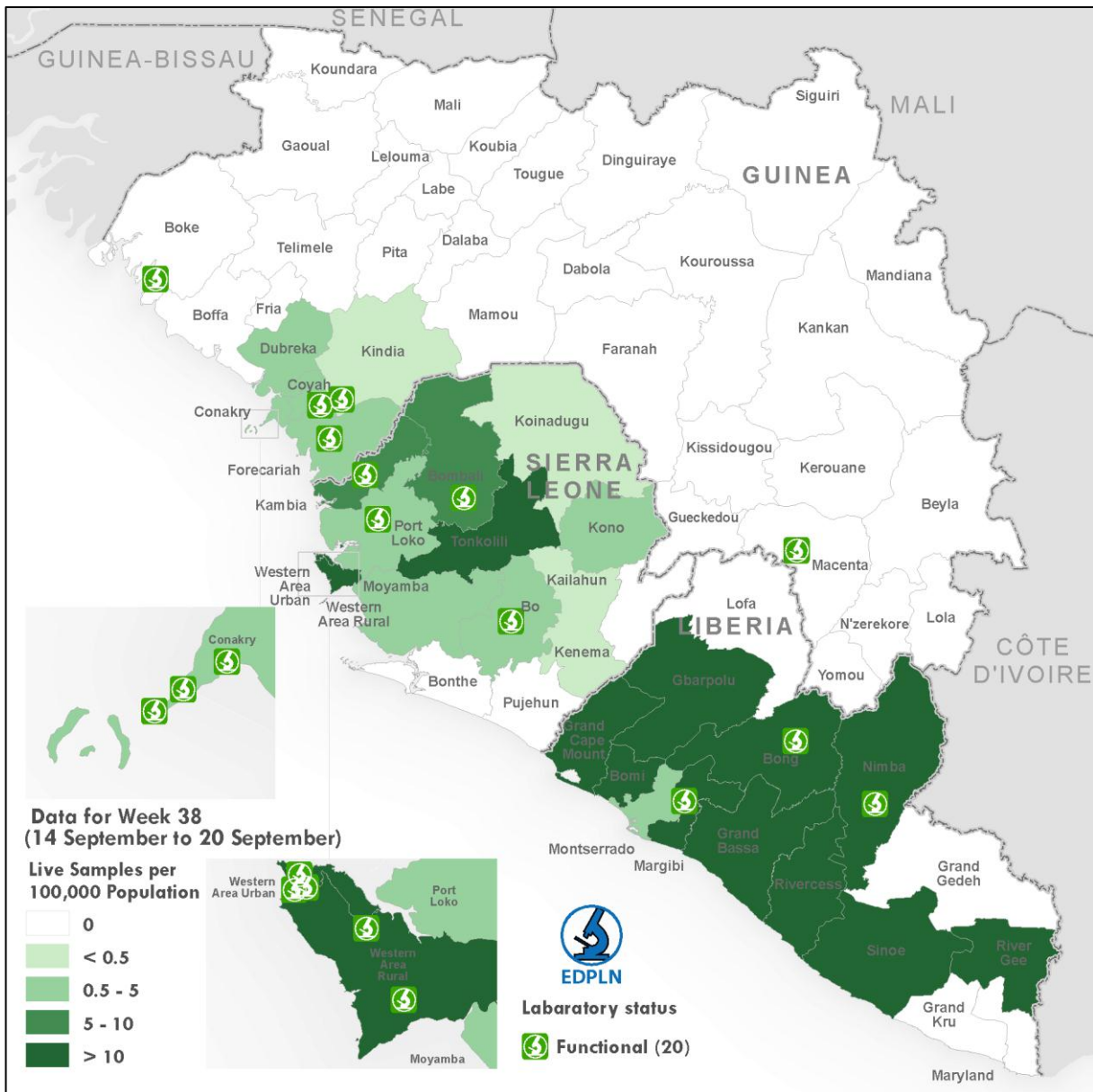


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OTHER AFFECTED AND PREVIOUSLY AFFECTED COUNTRIES

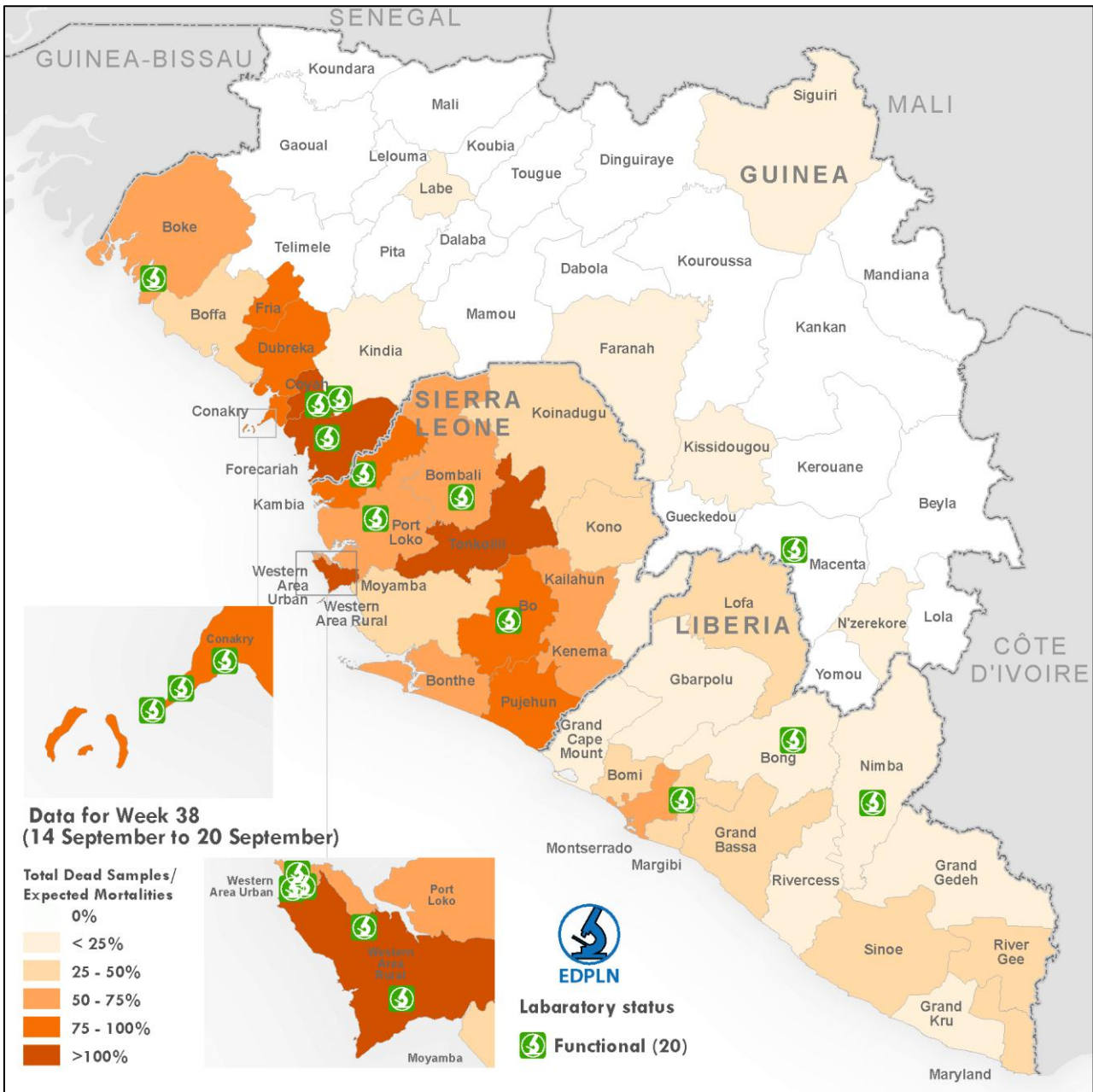
- Liberia was declared free of Ebola virus transmission in the human population on 3 September 2015, 42 days after the country’s last laboratory-confirmed case completed treatment and was confirmed as EVD-negative. It is now 64 days since symptom onset of the last reported confirmed case (figure 6). The country has now entered a 90-day period of heightened surveillance. 1435 samples were collected from 11 of the country’s 15 counties in the week to 20 September, although the capacity of the country’s 3 operational laboratories is not currently sufficient to rapidly test all samples. 84% of samples were blood samples taken from live suspect cases.
- 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



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.

Figure 8: Location of laboratories and geographical distribution of samples from dead bodies in Guinea, Liberia, and Sierra Leone



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.

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 September 2015, WHO has undertaken over 285 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 preparedness-strengthening activities have provided support on a country-by-country basis. Activities in the week to 23 September are highlighted below.
- 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. International Medical Corps with support from WHO ran a workshop on case definition and investigation for local nurses in Gabu.

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, 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 Burkina Faso, Ethiopia, and Guinea Bissau, and will start in the coming weeks.
- From 31 August to 5 September, Senegal with support from WHO conducted field exercises in the region of Kédougou, which borders Guinea. The exercises tested the application of national standard operating procedures across all response activities, district level response coordination and plans. Implementation of the national operational plan in Kédougou and collaboration across all stakeholders was evaluated.
- From 14 to 21 September, a simulation team was deployed to Benin to plan a series of simulation exercises in the country. The team undertook a joint evaluation to identify specific functions to be tested during the exercises; these will include overall response coordination, case detection, deployment of the rapid response

team, contact tracing, laboratory confirmation, and clinical management. The field and functional exercises will take place in November.

- Logistics training is currently being organised in collaboration with the Bioforce Institute, and is planned for mid-November and December. The training will involve ministry of health logisticians, and will help to strengthen the ability of a country to implement relevant logistics capacities swiftly and efficiently, in the event of an outbreak.

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 checklist⁵ 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, and 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 |

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

⁴ See: <http://apps.who.int/ebola/preparedness/map>

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

| Indicator | Numerator | Numerator source | Denominator | Denominator source |
|---|--|---|---|---|
| Cases and deaths | | | | |
| Number of confirmed cases | # of confirmed cases | Guinea: Daily WHO situation reports 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 |
| Infection Prevention and 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 burials | | | | |
| 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 |