
2014 Ebola virus disease outbreak: current context and challenges; stopping the epidemic; and preparedness in non-affected countries and regions

Report by the Secretariat

1. This report provides an update on the Ebola virus disease outbreak in West Africa and response during 2015.¹ It sets out the progression of the outbreak since January 2015 and outlines the steps taken in response, work on preparedness, research and development, and early recovery of health systems in the affected countries. The report concludes with an overview of the next steps for the response, especially in light of the staged decommissioning of the United Nations Mission for Emergency Ebola Response (UNMEER).

CONTEXT OF THE EBOLA OUTBREAK DURING 2015

2. Early 2015 saw a significant but variable decline in week-to-week case incidence of Ebola across Guinea, Liberia and Sierra Leone. At the end of April 2015, the geographic spread of transmission of Ebola virus disease had contracted and was mostly localized to six western prefectures of lower Guinea and four north-western districts of Sierra Leone. The response to the outbreak then shifted to a second phase built on the traditional public health interventions, however, challenges persist in fully implementing the standard of response required to interrupt residual transmission chains.

3. In Liberia, no new cases had been reported for three consecutive weeks, until a new case was identified on 20 March 2015. On 9 May 2015, 42 days after the burial of the last confirmed case, the outbreak was declared over in Liberia. The number of weekly cases in Guinea ranged from 74 at the beginning of this year to nine at the lowest in the last week of April. In Sierra Leone, the highest number of cases was 248 during the first week of 2015 but that number had dropped to nine cases per week at the end of April.

4. A substantial reduction in the number of districts with active transmission across the three countries has been off-set by persistently high transmission in the western areas of Sierra Leone and in and around Freetown, and in the lower region of Guinea and in and around Conakry. In the week to 26 April 2015, 76% of all confirmed cases were in Forecariah, a prefecture of Guinea, and the bordering district of Kambia in Sierra Leone.

¹ See document EBSS3/2 for the context and challenges of the outbreak, and response and preparedness activities conducted up to the end of 2014.

5. While responders continue to focus on ending transmission, the number of Ebola survivors is now higher than in any previous Ebola outbreak. The survivors, an already traumatized population, face substantial medical and psychosocial issues. The longer-term health complications of Ebola survival are being studied to develop guidelines for survivor treatment and care, and to minimize the ongoing impact of the disease.

6. Possible instances of sexual transmission have been reported from male survivors of Ebola virus disease to their partners. Although sexual transmission of Ebola is still to be confirmed, if verified, this route of infection presents another difficult challenge to sustain the interruption of transmission and the end of the outbreak. A research agenda is being implemented to better understand and manage the risks of sexual transmission. Interim guidance for management of the risks associated with sexual transmission of the disease among survivors recommends an extended period of screening for all survivors, complemented by essential counselling on safe sexual practices.

RESPONSE

7. By the end of 2014, WHO had established the largest emergency operation in its history in response to the Ebola crisis. As of 2 May 2015, over 800 deployees were in place across more than 60 field sites in Guinea, Liberia and Sierra Leone, with a further 37 staff in Mali. In early 2015, the Ebola response, led by UNMEER, shifted from its first to its second phase. Its first phase emphasized isolating and treating patients, safe and dignified burials, and promoting behaviour change. Phase two emphasized the critical importance of community engagement, contact tracing and case finding.

8. Logistical and programmatic challenges were anticipated during the rainy season, particularly in geographically remote areas. Operations during the first months of 2015 were concentrated, therefore, on limiting the transmission of Ebola to a contiguous band of coastal districts and directing additional resources to achieve this. Efforts are now targeted towards further limiting transmission to the border area between Guinea and Sierra Leone and maintaining vigilance in all other areas. WHO also has an ongoing programme of work across government and agencies to detail and address the programmatic and operational risks.

9. Heightened awareness and understanding of Ebola among many affected communities has enabled local ownership of the response. However, resistance in a small number of communities continues to be a challenge: deaths from Ebola continue to be identified in the community in Guinea and Sierra Leone, and new confirmed cases are recorded among people who cannot be linked to known chains of transmission. Improved anthropological analysis, detailed case investigation, active surveillance and community engagement in these areas is required to ensure that all remaining chains of transmission can be tracked and ultimately brought to an end.

10. Member States and local and international partners continue to provide critical financial and human support to the Ebola response.¹ With the support of governments and strong linkages with foreign medical teams, humanitarian agencies, the Global Outbreak Alert and Response Network and

¹ Key operational partners for WHO include: nongovernmental and humanitarian organizations (e.g. Médecins Sans Frontières, International Medical Corps, International Rescue Committee, International Committee of the Red Cross, Save the Children); as well as numerous other partners, including: the Government of Cuba and its medical brigades, United Nations agencies, funds and programmes (including: WFP, United Nations Office for the Coordination of Humanitarian Affairs, UNICEF, UNFPA, UNAIDS, and UNDP); and the African Union, Economic Community of West African States, International Federation of Red Cross and Red Crescent Societies, International Organization for Migration.

technical networks, such as the Emerging and Dangerous Pathogens Laboratory Network and Global Infection Prevention and Control Network, critical capacities for epidemiology, clinical, infection control and laboratory services across the three most affected countries have been expanded.

Preparedness activities

11. Despite the decrease in the overall incidence of Ebola cases, there is still a risk of introduction of the disease to other countries. WHO has undertaken extensive work in all regions to assist Member States to strengthen preparedness for possible Ebola cases. WHO continues to support countries with the aim of ensuring they are ready to safely and effectively detect, investigate and report potential Ebola cases, and to mount a rapid and effective response. On the basis of existing national and international preparedness efforts, including previous work to develop core capacities under the International Health Regulations (2005), a set of tools has been developed to support countries to intensify and accelerate their preparedness.

12. Based on geographical proximity to affected countries, trading dynamics, population movement and relative strength of the national health system, 14 countries in the African region were identified¹ and are receiving accelerated preparedness support. All priority countries are implementing budgeted national Ebola preparedness and response plans, have tested their systems through simulations and have taken measures to strengthen their capacities and capabilities to respond. Progress is shared publicly on the WHO Ebola Preparedness Dashboard.² The target is for countries to have achieved a score of at least 50% in the first six months of 2015. As of April 2015, 29% of priority countries had achieved this target, compared to 7% in December 2014.

13. The roll-out of preparedness support to countries is ongoing and directly linked to strengthening the International Health Regulations (2005) and ensuring that the core capacities to manage health emergencies due to multiple hazards are part of resilient health systems. The results and lessons learnt from Ebola preparedness are feeding into a common framework for action to strengthen global health security and multi-hazard risk management through the implementation of sustained preparedness activities in vulnerable countries.

International Health Regulations (2005)³

The Emergency Committee regarding Ebola

14. In 2015, the Emergency Committee regarding Ebola convened under the International Health Regulations (2005) has met twice, on 20 January 2015 and 9 April 2015. The Committee has maintained its August 2014 perspective that the outbreak constitutes a public health emergency of international concern. In January 2015, the Committee concluded that “getting to zero” Ebola cases remains the primary concern, and warned against complacency. The meeting in April 2015 called for the lifting of additional national measures that interfered with international trade and transport.

¹ The 14 countries in Africa identified as priority countries are Benin, Burkina Faso, Cameroon, Central African Republic, Côte d’Ivoire, Guinea-Bissau, Ethiopia, Gambia, Ghana, Mali, Mauritania, Niger, Senegal and Togo.

² Available at <http://apps.who.int/ebola/preparedness/map> (accessed 8 May 2015).

³ See document A68/22.

15. The Committee highlighted that additional health measures, such as quarantine of returning travellers, refusal of entry, cancellation of flights and border closure, significantly interfere with international travel and transport and have a negative impact on both the response and recovery efforts.

16. In keeping with implementation of the Committee's recommendations, WHO works with Member States to confirm the exact nature and public health rationale for any additional measures, and to ensure that the temporary recommendations issued by the Director-General under the International Health Regulations (2005) are well understood. At 1 April 2015, there were 570 reports of such measures, involving 69 countries; 47 verification requests had been sent where measures were perceived as excessive, and 23 justifications for the measures concerned had been received.

Establishment of a review committee

17. Further to the request,¹ the Director-General has prepared options for establishing a Review Committee under the International Health Regulations (2005) to examine the role of the International Health Regulations (2005) in the Ebola outbreak and response, with the following objectives:

(a) to assess the effectiveness of the International Health Regulations (2005) with regard to the prevention, preparedness and response to the Ebola outbreak, with a particular focus on notification and related incentives, temporary recommendations and additional measures, levels of emergency and declaring a public health emergency of international concern and building and validation of core capacities;

(b) to assess what was implemented and what was not from the previous Review Committee in 2011² and related impact on the effectiveness of the International Health Regulations (2005) in relation to the current Ebola outbreak;

(c) to recommend steps to improve the functioning, transparency, effectiveness and efficiency of the International Health Regulations (2005) and to strengthen preparedness and response for future emergencies with health consequences, with proposed timelines for any such steps.

18. The review will be conducted in accordance with Chapter III of Part IX of the International Health Regulations (2005) and WHO's Regulations for Expert Advisory Panels and Committees.³ The Director-General will appoint members of the Review Committee from the International Health Regulations Expert Roster,⁴ taking into account a number of elements, including: equitable geographical representation; gender balance; a balance of experts from developed and developing countries; representation of a diversity of scientific opinion, approaches and practical experience in various parts of the world; and an appropriate interdisciplinary balance.

¹ See resolution EBSS3.R1, paragraph 53.

² See document A64/10.

³ See Regulations for Expert Advisory Panels and Committees, Basic documents, Forty-eighth edition. Geneva: World Health Organization; 2014, pp. 121–130, also at: <http://apps.who.int/gb/bd/> (accessed on 8 May 2015).

⁴ More information on the Expert Roster is available at: http://www.who.int/ihr/procedures/ihr_committees/en/ (accessed 8 May 2015).

19. The Review Committee will be provided with all relevant documents and the conclusions of the interim assessment conducted by the panel of independent experts.¹ An extensive review of the implementation of the recommendations of the Review Committee on the Functioning of the International Health Regulations (2005) in relation to Pandemic (H1N1) 2009² will be conducted as part of the review.

20. The Review Committee will be supported by technical experts and the Secretariat, as appropriate, in relevant aspects of public health, the International Health Regulations (2005) and emergency response.

21. The Director-General will convene the first session of the Review Committee after the Sixty-eighth World Health Assembly, and present the Committee's preliminary findings to the 138th session of the Executive Board in January 2016. For the consideration of the Health Assembly, it is proposed that a final report be presented to the Sixty-ninth World Health Assembly in May 2016.

Research and development

22. With the research and development community, WHO has facilitated the review and consideration of numerous vaccines, drugs, therapies, and diagnostics for the treatment and detection of Ebola virus disease. WHO has convened many consultations to review emerging data and to discuss the way forward. Accelerated review procedures have allowed the fast-tracking of several of the vaccines and diagnostics.

23. The first rapid antigen test to diagnose Ebola was listed in February 2015 under the WHO Emergency Assessment and Use – a new procedure introduced to ensure acceptable quality, safety and performance standards for new medical products during an epidemic. Several other new tests are currently being assessed, including four head-to-head trials for rapid diagnostic tests taking place in Sierra Leone.

24. Clinical trials are under way in Guinea and Sierra Leone for convalescent blood and plasma therapies, and data from earlier plasma trials in Liberia are being analysed. The ZMapp and TKM-Ebola treatments are showing the most promise in preclinical animal studies.

25. Phase 3 efficacy studies of an Ebola vaccine – VSV-EBOV – commenced in Guinea on 23 March 2015 and in Sierra Leone on 9 April 2015. In Guinea the trial is led by a consortium of the Government, Canada, Norway, WHO, Médecins Sans Frontières, and other partners, following a “ring vaccination” design. In Sierra Leone the study is led by the Ministry of Health and sponsored by the Centers for Disease Control and Prevention (United States of America) and is based on individual randomization within clusters vaccinated sequentially. Phase 2 of a larger vaccine efficacy study is under way in Liberia in a collaborative effort between the Government of Liberia and the National Institutes of Health (United States of America), with each of three groups being administered either rVSV-ZEBOV, ChAd3-ZEBOV, or a placebo. A Phase 2 trial for the ChAd3-ZEBOV vaccine is planned in a number of African countries; Phase 1 trials for two other candidate vaccines have been completed.

¹ See document A68/25.

² See document A64/10, Annex.

26. WHO will be working on a blueprint for research and development in epidemics or health emergency situations where there are no, or insufficient, preventive and curative solutions. In the vaccines area, for example, this could include proactive establishment of “target product profiles” to guide development and the definition of accelerated regulatory pathways. Medicines activities could focus on development of robust preclinical models to better anticipate new drug development.

Building resilient health systems in Ebola-affected countries

27. The current Ebola outbreak has cemented the notion that resilience must be the foundation of every district health system. The WHO Framework for Health Sector Response, Recovery and Resilience from Ebola is focused on these three interdependent work areas.

28. WHO is playing a leading role in supporting the affected countries to safely reactivate health facilities and plan for health system recovery, working with national health authorities, nongovernment organizations, technical experts, and other partners to support early recovery efforts as a step towards long-term health systems development. Immediate early recovery needs include enhanced infection prevention and control and patient safety; increased capacity of the health workforce; strengthened surveillance; and the safe reactivation of essential health services.

29. In close collaboration with national governments, WHO has initiated the conversation on long-term health systems rebuilding and development. In addition, it has supported national authorities’ development of costed health system recovery plans. WHO continues to provide support to the affected countries in implementing such plans.

30. WHO will continue to work with each of the three most affected countries to support the implementation of national plans, and will focus on the health system constraints that existed prior to the epidemic, which contributed to the trajectory of the epidemic. Novel catalytic approaches to capacity development will be explored, for example, twinning partnerships. Lessons on safe reactivation of health services will be consolidated and shared.

LOOKING FORWARD

31. UNMEER responsibilities, functions and assets are being transitioned to national authorities and United Nations specialized agencies, funds and programmes in each country. UNMEER has concluded its operation in Mali and is working towards closure of its offices in Liberia by the end of May 2015, in Sierra Leone by the end of July 2015, and in Guinea by the end of August 2015. As UNMEER’s role in the affected countries gradually declines, WHO’s technical leadership and coordination of the response will take greater prominence.

32. The next step in the response is crucial, building on the progress, capacities and lessons to date. To accelerate the decline in cases, and to bring the outbreak to an ultimate end, efforts need to be redoubled across all major lines of action, with special emphasis on anthropological analysis, detailed case investigation, active surveillance and community engagement. These efforts will be guided by the 2015 WHO Strategic Response Plan: West Africa Ebola Outbreak.¹

¹ See 2015 WHO Strategic Response Plan: West Africa Ebola Outbreak, at: <http://www.who.int/csr/resources/publications/ebola/ebola-strategic-plan/en/> (accessed 8 May 2015).

33. Complacency among affected or at-risk communities remains a significant risk for the response, as does “Ebola fatigue” among donors and communities. The elimination of Ebola is necessary to ensure the reactivation of essential services and the future recovery of the affected countries. Accordingly, WHO will maintain field capacity into 2016. Continued international support will be central to ensuring the end of the outbreak.

ACTION BY THE HEALTH ASSEMBLY

34. The Health Assembly is invited to note this report, to consider the draft decision contained in document A68/51, and to endorse the establishment of a review committee under the International Health Regulations (2005), whose purpose is to examine the role of the International Health Regulations (2005) in the Ebola outbreak and response.

= = =