World Health Organization

EXECUTIVE BOARD
Special session on Ebola
Provisional agenda item 3

EBSS/3/2

EXECUTIVE BOARD
136th session
Provisional agenda item 9.4

EB136/26
9 January 2015

Current context and challenges; stopping the epidemic; and preparedness in non-affected countries and regions

Report by the Secretariat

1. The 2014 Ebola Virus Disease (EVD, or "Ebola") outbreak is the largest and most complex Ebola outbreak on record, with an unprecedented number of affected countries and thousands of cases and deaths.[1] Widespread and intense transmission is devastating for families and communities, compromising essential civic and health services, weakening economies and isolating affected populations. The epidemic has had broad impact on the socioeconomic stability of the region and, with readily accessible international travel and fluid population movements, represents a threat to global health security. Furthermore, the outbreak has placed enormous strain on national and international response capacities, including WHO's outbreak and emergency response structures, systems and capacities.

2. This document contextualizes the outbreak, providing a summary of the virus' spread, the country-level and global response, work on preparedness, research and development and building resilient health systems in the affected countries. The document concludes with an overview of the strategy for bringing the outbreak to an end.

CONTEXT OF THE EBOLA EPIDEMIC IN WEST AFRICA

3. The first cases in the current Ebola outbreak in West Africa were diagnosed in late March 2014 in Guinea. By this time, the virus had circulated undetected for at least three months and had spread beyond borders into neighbouring Liberia and Sierra Leone, with the index case believed to have been in Guéckédou Prefecture in December 2013. All three countries were suffering economically, following years of civil war and unrest, and in spite of determined efforts, their health systems remained weak, including with regard to surveillance and laboratory capacity. Populations of interconnected families and communities living close to porous borders moved easily and regularly between countries. Timber harvesting and mining over the previous decades had changed the ecology of densely forested areas. Fruit bats, which are thought to be the natural reservoir of the virus, moved

[1] Situation Reports: http://www.who.int/csr/disease/ebola/situation-reports/en/.

closer to human settlements. Collectively, this presented a favourable context for a virus like Ebola to spread.

4. As Ebola Virus Disease outbreaks had not been seen before in Guinea, Liberia[1] or Sierra Leone, health care workers initially suspected that patients had other, more familiar or prevalent conditions, such as cholera or Lassa fever. By the time Ebola was diagnosed and the international community notified, the virus had spread widely via multiple transmission chains in remote rural areas as well as in cities, including Conakry. The breadth of infections across the countries blunted the impact of conventional control measures. Traditional cultural and behavioural practices, including funeral and burial customs, further contributed to persistent and intense virus transmission.

5. In July, the virus was imported to Nigeria in the first known spread of Ebola through air transport. Subsequent imported cases in Mali, Senegal, Spain, the United Kingdom of Great Britain and Northern Ireland and the United States of America [2] have reinforced the global nature of the outbreak and its threat to global health security.

RESPONSE

Scaling up response efforts

6. By the second half of June 2014, the dynamics of disease transmission made clear that this outbreak was a greater challenge than previous outbreaks. With the full engagement and leadership of the presidents of Guinea, Liberia and Sierra Leone and following an emergency meeting of Health Ministers from 11 African countries, a sub-regional Ebola Outbreak Coordination Centre was established in Conakry, Guinea in July. At the end of August 2014, despite efforts on the part of national governments and international partners, cases across the three worst affected countries were increasing at a rate that far outpaced the capacity of the traditional, core Ebola control package consisting of (i) case finding and contact tracing; (ii) community ownership; (iii) case management; and (iv) safe and dignified burials. However, due to the size, geographic spread and complexity of the outbreak, the ability to scale those interventions was limited. Many of the challenges related to critical enabling factors, including logistic capacities; air transportation; remuneration and training of national staff; mobilizing international expertise; medical care and security of health care workers; availability of adequate isolation, care and treatment facilities and essential supplies; and community-led approaches to combat propagation of EVD.

7. To assist governments and partners in the revision, resourcing and implementation of country-specific operational plans for Ebola response, WHO issued an ‘Ebola Response Roadmap’ on 28 August 2014. To organize international support for the broader effort needed to implement national Ebola control efforts and ensure continuity of essential services, the United Nations launched the

[1] An isolated case of Ebola Virus Disease, without secondary transmission, was described in December 1995 in Plibo, Liberia.

[2] On 24 August 2014, WHO was notified by the Democratic Republic of Congo of an outbreak of Ebola virus disease in Jeera County, Equateur Province. This outbreak was unrelated to that affecting West Africa. On 20 November 2014, 42 days following the second negative test of the last case, the outbreak was declared over.

STEPP Plan[1], incorporating WHO's Ebola Response Roadmap, and on 18 September 2014 established the UN Mission for Emergency Ebola Response (UNMEER) [2] to facilitate its implementation. Due to the unprecedented scale and scope of the outbreak, the STEPP Plan was predicated on a phased approach, with the first phase designed primarily to slow the exponential increase in new cases as quickly as possible through an emphasis on urgently building treatment facilities, providing safe and dignified burials and promoting behaviour change to rapidly reduce the intensity of transmission. Immediately on its establishment, UNMEER established a target of having 70% of cases isolated and 70% of burials carried out in a safe and dignified manner by 1 December 2014.

8. Member States play a vital role in the response in support of affected countries, providing essential financial support, personal protective equipment, laboratory facilities, Ebola treatment centres and, perhaps most importantly, response personnel. Critically, local and international health care workers tirelessly dedicate their days to Ebola patients, and local communities organize to change behaviour to slow the disease and manage the aftermath of Ebola. International support for the response has also had significant impact. Implementation work is being carried out by specialized UN agencies, funds ad programmes, including World Food Programme, UNICEF and the United Nations Population Fund. National agencies, including the United States Centers for Disease Control and Prevention, have provided enormous technical capacity, and the dedication of substantial military assets from the United Kingdom of Great Britain and Northern Ireland and the United States of America have changed the face of operations and logistics. The African Union and the Economic Community of West African States readily committed numerous clinical and public health experts for deployment to the affected countries. Partners in the Global Outbreak Alert and Response Network were quick to send experts to support the response on the ground. National and international non-governmental organizations (NGOs) and humanitarian organizations are managing Ebola treatment centres and fighting Ebola on the front lines. The International Federation of the Red Cross and Red Crescent Societies has trained and deployed hundreds of teams to carry out safe and dignified burials. Médecins Sans Frontières is operating treatment centres in all three countries. Many other NGOs are providing support in key areas, ranging from communications systems, mapping and construction. The International Organization for Migration is managing Ebola treatment centres and assisting in important cross-border disease control efforts in the region.

9. As of the end of December 2014, through the concerted efforts of national governments and their partners, an overarching operational plan for the response was developed, national emergency operations centres provided stronger coordination in each country, a reliable air bridge was established between and within the affected countries, massive public communications efforts were undertaken, and the number of Ebola treatment beds and safe burial teams available across the region more than doubled. Exponential growth in cases had stopped and where high levels of treatment and safe burials were combined with intensive case finding and contact tracing, transmission had, in certain areas, been reduced to zero. Awareness of Ebola and its control measures was high in most areas of all three countries. However, the degree to which that knowledge translates into behaviour change is highly variable. Additionally, although sufficient Ebola treatment and safe burial capacity now exists across the region, the full utilization of this capacity requires a shift from community awareness to full

[1] Stop the outbreak; Treat the infected; Ensure essential services; Preserve stability; and Prevent outbreaks in countries currently unaffected. Please see *Ebola Virus Disease Outbreak: Overview of needs and requirement* available at https://docs.unocha.org/sites/dms/cap/ebola_outbreak_sep_2014.pdf.

[2] Statement by the Secretary-General on the establishment of the United Nations Mission for Ebola Emergency Response (UNMEER), available at http://www.un.org/sg/statements/index.asp?nid=8006

ownership of the programme by affected populations. It is also clear that to eliminate Ebola in the three most affected countries of West Africa, it will be necessary to couple the first phase activities and capacities with comprehensive case finding, contact tracing and community ownership, tailoring response activities to the epidemiology of a given geographical area.

Preparedness activities[1]

10. It is urgent that countries without cases of EVD be operationally ready for the possible introduction of the virus so that rapid, decisive and safe actions can be taken to prevent the further spread of disease. All regions have established regional Ebola Task Forces, developed regional response plans, and regularly briefed the health ministries in their countries. Significant efforts have been made in all WHO regions to strengthen Ebola preparedness, including regional on-line surveys to assess country capacity to respond to Ebola. WHO Regional offices also have EVD response plans with emergency operating centres and rapid response teams in place or being established. Stockpiles of essential personal protective equipment are being pre-positioned to respond to the immediate needs of countries that detect case of EVD.

11. International Ebola preparedness strengthening support teams, composed of experts from UNMEER, WHO and international partners, have completed assessment missions to 14 priority countries in Africa. In all cases, it was noted that these countries required substantial support to reach adequate levels of preparedness in many, if not all, of the 11 components measured. In 71 other countries around the world, support to improve preparedness levels has been provided.

International Health Regulations[2]

12. On 8 August 2014, the Director-General declared the Ebola outbreak in West Africa a Public Health Emergency of International Concern. In accord with IHR notification requirements and through other channels, Member States have since reported hundreds of rumours of possible Ebola cases, each of which has been followed up with a substantial dedication of limited financial, technical and human resources to verify or eliminate.

13. The Emergency Committee regarding Ebola has met three times, in August, September and October and the Director-General has, on each occasion, endorsed and issued Temporary Recommendations. These recommendations include exit screening for travellers leaving affected countries, with normal travel procedures in all non-affected countries. Specifically, the temporary recommendations indicate that there should be no bans on international travel or trade, except with regard to EVD cases and contacts. However, some non-Ebola affected Member States have implemented additional health measures, including travel restrictions.

14. To support the implementation of the recommendations, WHO has communicated regularly with Member States and worked closely with relevant partners. In particular, the heads of WHO, the International Civil Aviation Organization (ICAO), the World Tourism Organization (UNWTO), Airports Council International (ACI), International Air Transport Association (IATA), the World

[1] Please see document EBSS/3/INF./3 (EB136/INF./6) for further details on EVD preparedness activities and progress and challenges to strengthen Member States alert and response capacities.

[2] Please see document EBSS/3/INF./4 (EB136/INF./7) for further details on the triggering and implementation of the International Health Regulations (2005) in response to the West Africa Ebola outbreak.

Travel and Tourism Council (WTTC) decided to activate a Travel and Transport Task Force to monitor and provide timely information to the travel and tourism sector as well as to travellers. Other agencies joined later, including the International Maritime Organization (IMO), expanding the scope of the task force to include shipping and trade.

Research and development[1]

15. In response to the escalating outbreak and based on independent expert advice, the best available data and ethical oversight, the research and development community have taken on emergency programmes of work to fast track potential vaccines, therapies and diagnostics for Ebola. As a result a number of products have been prioritized for further investigation, including two candidate vaccines, two antiviral drugs and convalescent whole blood and plasma. In addition, Member States, partners and WHO are working on emergency procedures for assessment and fast-track development of adapted diagnostics, and joint reviews of clinical trial protocols.

16. Phase 3 clinical trials to evaluate the effectiveness of the lead candidate vaccines are expected to start in the three most-affected countries in January and February. Moreover, Phase 2 clinical trials of the ChAd3-ZEBOV vaccine are expected to begin in Cameroon, Ghana, Mali, Nigeria and Senegal in late January 2015. Two other vaccine candidates are due to enter clinical trials in January 2015, and more vaccine candidates are advancing towards clinical evaluation later in the year. To help address concerns regarding access, on 11 December 2014 the GAVI Alliance's Board committed up to US$ 300 million to procure Ebola vaccines and to immunize at risk populations in affected countries. Up to an additional US$ 90 million could be used to support countries to introduce the vaccines, to rebuild devastated health systems and to restore immunization services in Ebola-affected countries.

Building resilient health systems in Ebola-affected countries [2]

17. At the time the outbreak began, the capacity of the health systems in the affected countries, although improving in certain areas, was still limited. Several health-system functions that are considered essential required substantial investment, including infrastructure, logistics, health information and governance. The small numbers of qualified health care providers delivered services in poor working conditions. Though increasing, government health expenditure was low whereas private expenditure – mostly in the form of direct out-of-pocket payments for health services – was relatively high. In particular surveillance and response capacity was weak, which hampered information sharing and the development of a suitable and timely response to the outbreak.