2015

WHO STRATEGIC RESPONSE PLAN

West Africa Ebola Outbreak

World Health Organization

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2015 WHO Strategic Response Plan: West Africa Ebola Outbreak

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INTRODUCTION

The outbreak of the Ebola Virus Disease (EVD) in West Africa is unprecedented in its scale, severity, and complexity. Guinea, Liberia and Sierra Leone are still affected by this outbreak, and are struggling to control the epidemic against a backdrop of extreme poverty, weak health systems and social customs that make breaking human-to-human transmission difficult. While encouraging progress has been made, there is still a considerable effort required to stop all chains of transmission in the affected countries, prevent the spread of the disease to neighbouring countries and to safely re-activate life saving essential health services.

Strategic objectives for WHO

1. Stop transmission of the Ebola virus in affected countries
2. Prevent new outbreaks of the Ebola virus in new areas and countries
3. Safely reactivate essential health services and increase resilience
4. Fast-track Ebola research and development
5. Coordinate national and international Ebola response

Context

WHO has led the international community in developing the health strategies and approaches required to control and end this Ebola outbreak. WHO is still engaged on the front line, implementing many of the major health interventions. To support the response operation, WHO currently has over 700 staff deployed to all 63 districts, prefectures and counties across the three worst affected countries. This is the largest emergency operation the Organization has ever undertaken.

In all of its country operations, WHO has worked under the leadership of the respective National Coordination Centre and relied on close collaboration with governments, partners and communities. In the three most-affected countries, WHO continues to provide technical, normative, material and operational support to the relevant ministries. WHO has collaborated closely with the UN Mission for Ebola Emergency Response (UNMEER) and UN agency partners – especially UNICEF, WFP, OCHA, UNFPA, and UNDP – to ensure a coherent and effective operation across all response activities. WHO has also coordinated and collaborated closely with other partners – such as the African Union, US Centers for Disease Control (CDC), Médecins Sans Frontières (MSF), the International Federation of the Red Cross (IFRC), the International Organization for Migration (IOM), UNAIDS and partners of the Global Outbreak Alert and Response Network (GOARN) – to extend coverage of the key surveillance, clinical and public health interventions for the response. WHO is totally committed to strengthening these partnerships that are vital to ending the outbreak.

In August 2014, WHO drafted the *Ebola Response Roadmap* to set out the core strategy for stopping this unprecedented outbreak and to provide the basis for a significantly increased response. This was the basis for the UN system's *Overview of Needs and Requirements* (ONR) and STEPP Strategy[1] that followed. These were designed to assist governments and partners in the revision and resourcing of country-specific operational plans for the Ebola response, and to aid the coordination of international support to fully implement those plans. The ONR was used as the basis for a massive scale-up in the response under UNMEER, for which WHO is the lead technical and health agency.

The WHO Roadmap and subsequent STEPP Strategy outlined a phased operation in the areas of the most intense transmission, with the initial emphasis on slowing the exponential increase in cases that was documented in August – September as quickly as possible. This required a rapid scale-up of treatment facilities, burial capacity and behavioural adaptation to slow the exponential increase in new cases, followed by the rapid scale-up of rigorous case finding, contact tracing and intense community engagement to interrupt residual transmission chains.

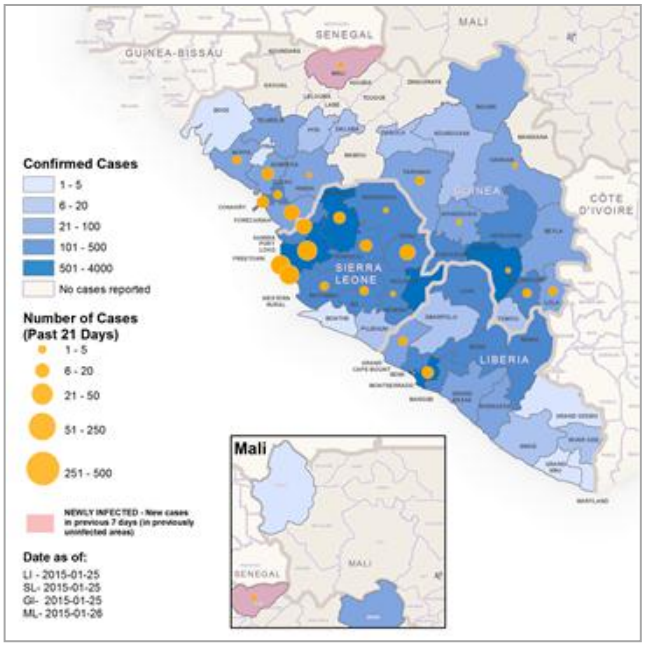
The first phase of the strategy successfully tackled the largest outbreak of Ebola ever witnessed and reversed the rapid increase in case numbers seen up until September. The second phase of the strategy has already shown it is possible to reduce cases in both densely populated urban areas as well as remote rural areas, including in Monrovia (Liberia) and the forest areas of Guinea. The programme has learnt from mass campaigns, such as the polio eradication initiative that uses detailed micro-planning to reach every household. Learning the lessons of these successes, WHO is working with partners to drive the number of cases to zero.

[1]STOP the outbreak, TREAT the infected, ENSURE essential services, PRESERVE stability and PREVENT outbreaks in countries currently unaffected

Epidemiological situation

Following a rapid decline from the peaks of over 800 cases per week in October and a substantial reduction in the number of districts with active transmission across the three countries, the number of cases week-to-week since late January 2015 has plateaued. This is largely due to persistently high transmission in the western areas of both Guinea and Sierra Leone, with particular foci of concern in and surrounding the capital cities of Conakry and Freetown.

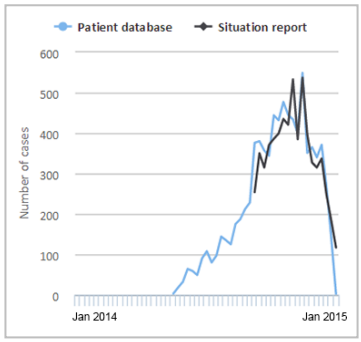
West Africa Ebola Outbreak



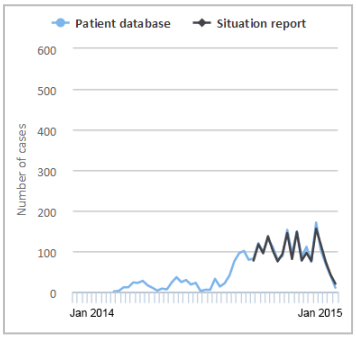
Distribution of Ebola cases in the most affected countries as at March 1, 2015

The reasons for persistent transmission in West Africa are reflected in statistics used to monitor the response to the Ebola epidemic. In Guinea and Sierra Leone, case finding reveals not only new Ebola patients, but also Ebola deaths in the community and numerous instances of unsafe burials. In addition, a significant fraction of new confirmed cases is recorded among people who are not known to be contacts of previous cases, or who cannot be linked to known chains of transmission. Case management has not yet reached the highest standards: it still takes 2-3 days on average to isolate potentially infectious cases, and case fatality among hospitalized patients remains high (around 60%). In addition, health workers continue to be exposed to infection.

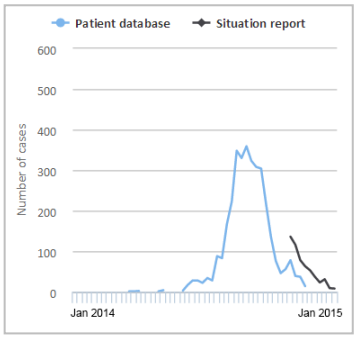
Sierra Leone



Guinea



Liberia



Ebola cases over time in the most affected countries as at March 1, 2015

Current response situation

Communities, together with their governments and international responders, are working together to better understand the risks, manage expectations, identify and trace people with Ebola and their contacts, treat the infected and provide safe and dignified burials for those that have lost their lives. The following sections explain the status of each aspect of the response and WHO's role within each.

Case management

Over 60 specialized Ebola treatment units (ETUs) are capable of providing approximately 3,000 beds for Ebola care in the three most-affected countries. More than 40 organizations and 58 foreign medical teams (FMTs) have deployed an estimated 2,500 international personnel[2] to operate these centres in partnership with ministries of health and thousands of national staff. This complex environment is coordinated by a WHO team in each country that works closely with advisers on infection prevention and control and clinical management to provide support to all partners deployed. In addition to the ETUs, over 63 Ebola community care centres (CCCs) have been established to promote greater community engagement in the Ebola response.

The increased number of beds that have been created since August is now sufficient to isolate and treat all known cases across the three countries and has been a key factor in controlling the outbreak so far. In fact, such good progress has been made with the decline in the number of total cases that the repurposing and decommissioning of some ETUs has commenced. This expanded capacity to isolate cases, along with safe and dignified burials and behavioural changes in communities has been a key factor in controlling the outbreak so far.

[2] Teams include 265 Cubans, 840 African Union staff, and come from countries such as the United Kingdom, China, Norway, Sweden, Denmark, Australia, New Zealand, Korea, the United States of America, France, Germany and many others, as well as significant numbers of teams and staff from international NGOs and organizations such as MSF, International Medical Corps (IMC), IFRC, Save the Children, Alliance for International Medical Action (ALIMA), International Rescue Committee (IRC), ARC, Emergency and Partners in Health (PIH).

Safe and dignified burials

All countries now have sufficient capacity to bury all of the deceased in a safe and dignified manner. There are currently 210 burial teams active across the three countries. While this capacity has played a crucial role in helping to dramatically reduce the number of cases, some problems persist. A number of Ebola deaths continue to occur in communities (indicating that cases are not always coming forward for isolation and treatment) and unsafe burials continue to be documented, especially in Guinea and Sierra Leone. WHO, with the support of UNAIDS, has worked with faith-based organizations to develop safe and dignified burial protocols that are currently being used. While progress has been made, there are still instances where communities perceive that there is not enough allowance for prayer and spirituality during burial services. This can sometimes lead to resistance and unsafe burial practices. More work needs to be done to address these issues.

Infection prevention and control (IPC)

WHO and partners have provided expertise to guide IPC policy and clinical practice through the publication of emergency guidelines and direct support for health workers in the clinical management of patients with Ebola, on personal protective equipment (PPE), laboratory procedures, contact tracing, safe burials and waste management. Such public health advice is essential to inform the health workforce and other international responders about transmission risks and safety measures. Moreover, in coordination with major partners such as UNICEF, and WFP, WHO has supplied more than one million sets of PPE and has provided extensive training for health workers and front-line responders on, among other Ebola interventions, infection control practices, occupational health and safety, clinical management and safe burial. WHO has advocated successfully for the protection of health workers in all settings, health worker infection investigations, provision of dedicated treatment facilities for infected health workers and has played the lead role in coordinating medical evacuations where necessary.

Surveillance and contact tracing

WHO, together with the US Centers for Disease Control, has led the surveillance, case finding, contact tracing, data management and epidemiological analysis with national governments in the three most-affected countries. WHO has coordinated with GOARN partners to deploy over 600 public health experts during the course of the response to assist in surveillance, field epidemiology, case finding, contact tracing, information management and epidemiological analysis. This has contributed to the significant increase in the number of new cases coming from contact lists and the consistent mapping of chains of transmission. WHO has coordinated the deployment of more than 230 experts to 26 mobile laboratories via laboratory partners through the Emerging and Dangerous Pathogens Laboratory Network (EDPLN), which is a central pillar of GOARN. These field laboratories can now test more than 750 samples per day if needed. This capacity has enabled the rapid confirmation of cases in the three most-affected countries.

Community engagement

WHO has worked to strengthen community engagement in order to build and maintain trust between local communities and frontline workers. This has included informing the selection, prioritization and adoption of appropriate prevention and control measures through dialogue between communities and technical teams. WHO has also worked with communities to reinforce the key actions that they can take, counter misinformation that they may have received and mitigate misinterpretation of health advice by proactive listening and addressing community concerns and fears.

To this end, WHO has engaged anthropologists to work with community and religious leaders to address fear and stigma of the disease, to negotiate alternatives and adaptation of religious and cultural practices and to encourage seeking treatment through dialogue with communities. WHO has coordinated the inputs of specialized disciplines and professional networks to develop a community engagement model, based on best practice, for the safe and rapid roll out of the Ebola treatment and community care centres as well as interim guidance on community engagement for blood donors.

In collaboration with UNICEF and other partners, systems are being put in place to ensure community engagement methodologies are being applied to constructively manage dialogue with communities. While progress has been made, it is critical that service providers continue to build trust and make sure services are responsive to community concerns and needs. Social and traditional media have been used to reach millions of people in the three most-affected countries as well as in the 14 highest- and high-risk countries[3] in the African region. By promoting community approaches and engaging survivors to work alongside other responders, WHO is helping to minimize the stigmatization of communities affected by Ebola.

[3] Benin, Burkina Faso, Cameroon, Central Africa Republic, Côte d'Ivoire, Ethiopia, Gambia, Ghana, Guinea-Bissau, Mali, Mauritania, Niger, Senegal and Togo.

OVERALL STRATEGY

The next step in the response is crucial: to build on the progress and lessons to date, especially on the critical role of communities. A critical step will be to limit the spread of the virus to the coastal areas of the three high-transmission countries before the onset of the rainy season in April–May 2015. The priority is to identify and isolate all new cases by the end of May, and to confirm that they have come from known transmission chains and contact lists.

Getting to zero Ebola cases

WHO will further expand efforts to identify all potential contacts of cases through in-depth, integrated community and epidemiological investigations. For those who are admitted to Ebola treatment facilities the aim is to decrease case fatality rates from 70% to <50%, while ensuring increased safety for health workers.

District coordination

To achieve these goals it is essential to further strengthen district surveillance, risk assessment and response operations, and to ensure that each district has a flexible plan specific to their epidemiological situation and social / anthropological context. WHO will continue to play a lead role in the district-level coordination of the Ebola health response with field coordinators established in over 63 districts in the three affected countries. It is critical to ensure that timeliness and responsiveness of service delivery to families and communities remains a priority in order to build and maintain trust with communities.

Equally important is to maintain capacity at the national and district levels to respond rapidly to new outbreaks and areas of reinfection, as well as to reinforce cross-border collaboration. Districts adjoining international borders are strengthening cross-border operations with neighbouring districts to coordinate surveillance and information sharing and, if needed, contact tracing and other response operations.

Active surveillance

Active surveillance and contact tracing will continue with “zero weekly reporting” of suspected Ebola cases through integrated disease surveillance at public and private health facilities as well as community event-based surveillance in areas of particular risk. WHO and partners are establishing capacity to conduct integrated epidemiological case investigations through anthropological contributions and engagement with communities to establish transmission chains and identify contacts. Contacts will need to be systematically monitored for 21 days, and across national and international borders where required. Reliable management of epidemiological and socio-cultural data to design and implement targeted strategies, as well as the continued laboratory diagnostic capacities for Ebola, will be essential. Even

after the last case has been identified, a long period of active surveillance will be required to ensure all chains of transmission have been found and that there has been no re-emergence.

WHO is also highly engaged in the design and implementation of heightened surveillance and alerts frameworks in compliance with Integrated Disease Surveillance and Response (IDSR) and International Health Regulations (IHR) recommendations. This includes dedicated cross-border strategies, strengthening of the alerts system, and reinforcement of the capacity to verify and investigate alerts.

Community engagement mainstreamed

Communities have been, and will continue to be, the most critical part of an effective response. Mainstreaming community engagement within service delivery, for example through the training of frontline staff in trust building and communication skills, and re-orientating social mobilization activities to address service uptake will be a priority. Strengthening technical and operational support to the departments of health education/health promotion within ministries of health will enable sustainable capacity is built by utilizing existing infrastructure and networks to lay the foundations for community engagement post-Ebola.

The capacity to systematically and routinely develop and execute tailored community engagement strategies will need to be strengthened at the district level. Respectful and timely engagement of communities before and during critical response events, such as case investigations and burials, can mitigate community resistance and ensure support for and the safety of operations. Tailored and targeted strategies to engage with different groups – chiefs, religious leaders, women and youth – are required. Special attention needs to be paid to more effectively reaching out to women's groups and HIV/AIDS networks. Similarly, response teams need to be sensitive to and aware of the community context when responding. Anthropological analysis combined with expertise in community engagement and strengthening the leadership of health promotion is proving effective at guiding operational and technical approaches so that the voices and perspectives of communities are taken into account during decision-making.

Optimize case management

A key element of building community trust is to provide the highest standard of care for all those with Ebola – and to keep family members informed of the progress of their loved ones. Establishing community liaison officers at treatment centres has been important good practice. Case management capacity, triage and infection control procedures need to be optimized to increase survival rates as well as to reduce the number of health workers becoming infected with the disease. It is also important to manage the capacity and geographical distribution of Ebola treatment centres and foreign medical teams as the epidemiological situation changes. This may include the decommissioning and/or repurposing of ETUs and community care centres no longer required for patient isolation, redeployment of foreign medical staff to

assist with the safe reactivation of essential non-Ebola healthcare services, or using existing Ebola treatment centres to conduct clinical trials of new treatments. The longer-term health complications of Ebola survivors are currently being studied and guidelines for their treatment and care will be developed in order to minimize the impact of the disease on an already traumatized population. These guidelines will then be used by national and international medical teams going forward.

Preventing outbreaks of the Ebola virus in other countries

While stopping transmission in the affected countries is critical, ensuring the Ebola virus does not spread to new areas and countries is equally important. Through the International Health Regulations (2005), WHO has activated the instruments that promote appropriate response and preparedness measures for the health security of all Member States. WHO's Ebola preparedness activities aim to ensure all countries are ready to safely and effectively detect, investigate, manage and report potential Ebola cases, and to mount a rapid and effective response. WHO has developed an Ebola preparedness checklist based on lessons learned from the three most-affected countries as well as the experiences of other countries responding to imported Ebola cases.

Bordering countries

The first priority is to ensure Ebola operations centres and incident management systems are in place in the four bordering countries: Côte d'Ivoire, Guinea-Bissau, Mali and Senegal. Enhanced surveillance, early warning systems and response in these countries will be integrated into the health system and further strengthened through active and community-based surveillance.

The communication of risk needs to be done in line with risk assessment and risk mitigation strategies in tandem with community engagement strategies. National communication strategies need to inform and engage the public in ways that build trust, and provide relevant information on the Ebola outbreaks in neighbouring countries in addition to engaging communities in measures to reduce the risk of exposure. Rapid response capacities and isolation units where any suspect Ebola case can be properly investigated need to be available as well as processes for rapidly shipping diagnostic specimens to a WHO-recognized laboratory.

Particular attention will be paid to ensure agreements and standard operating procedures between internationally bordering districts are established to outline mechanisms for sharing information, diagnostic capacity, facilities, logistics, human resources and training. WHO will continue to ensure the availability of experts in case management, infection prevention and control, surveillance and community engagement in these bordering countries to ensure rapid response if and when required.

Priority countries

WHO has undertaken assessment missions in the 14 priority countries[4] to evaluate the levels of preparedness for an Ebola outbreak based on the standardized checklist of required measures. The mission findings and progress on implementing the recommended actions are shared publically on the WHO website. National preparedness plans have been developed and costed on the basis of these findings. The next step is to ensure the priority capacities outlined in the Ebola preparedness checklist are established in all 14 countries. Follow-up missions have recently commenced to review progress and establish multi-stakeholder work plans. Moreover, WHO is supporting preparedness activities through the deployment of technical experts in each priority country to implement outstanding preparedness actions, including the provision of sufficient supplies and equipment to manage cases for at least 10 days. In addition to the 14 priority countries, support is being provided for the preparedness of other countries through WHO regional and country offices.

Global alert and response readiness

In accordance with International Health Regulations (IHR), WHO will continue global alert and response readiness activities to strengthen worldwide event-based surveillance and reporting of signals of potential Ebola cases through IHR national focal points and via independent monitoring and risk assessments. To date six other countries have reported an imported Ebola case or cases (Mali, Senegal, Nigeria, Spain, the United States of America, and the United Kingdom). These have now been controlled. All of these examples confirm that a rapid and strong response to an Ebola outbreak is not only essential, but possible, and is the most important factor in controlling the disease and consequently stopping its spread. WHO, with the support of GOARN and other partners, will continue to prepare and deploy rapid response teams as required, strategically manage and coordinate operational information through the WHO Strategic Health Operations Centre, and support countries to manage imported Ebola cases.

Safe reactivation of essential health services and increasing resilience

Ebola became epidemic in the affected areas in large part because of the weakness of the health systems. Particular structural weaknesses included insufficient numbers and distribution of qualified health workers, and inadequate surveillance, notification and information systems. Infrastructure, logistics, governance and medicines supply systems were similarly weak. The organization and management of health services was sub-optimal. Government health expenditure was low and inadequate to ensure universal access to basic services, whereas private expenditure – mostly in the form of direct out-of-pocket payments for health services – was regressively high. External funding was skewed towards millennium development goals (MDGs) through vertical programmes with limited investments in core health systems functions. These

[4] 14 priority countries include the 4 bordering countries

weaknesses were further exacerbated during the epidemic, when existing public health services were almost entirely diverted to Ebola. People have encountered significant barriers to accessing essential services, such as vaccination, maternal and child health and treatment for common illnesses. In this context, the scale of the crisis escalated because the health systems in the affected countries lacked resilience.

Health workforce

With over 850 health workers infected and more than half dying from the Ebola virus, pre-existing health workforce shortages and poor distribution was further exacerbated. The resultant fear and distrust fuelled the mass attrition of health workers, strikes and disruptions to routine health services. Public sector labour expenditure caps resulted in 41% of government health workers working without being on the payroll in Liberia and large numbers of vacancies despite substantial needs in Sierra Leone. Rapid workforce analysis, planning, deployment, capability development and management are essential preconditions to the reactivation of essential health services and core health systems functions. WHO is supporting Guinea, Liberia and Sierra Leone to assess emergency hiring needs, rebuild trust, coordinate efforts to identify and resolve employment and performance barriers, and strengthen health workforce information systems and accountability.

Essential health services

The immediate objective is to support national authorities and civil society to safely reopen health facilities and reactivate essential health services in both urban and rural settings. Such services must include maternal, child and reproductive health as well as vaccination programs. In addition, it is vital to support countries in the development and implementation of national plans developed in partnership with non-state health providers aimed at building both resiliency in the face of future outbreaks and emergencies, and, in the longer term, the capacity to provide universal access to safe, high-quality health services. To that end, WHO is providing technical expertise to Guinea, Liberia and Sierra Leone for the formulation of rapid early recovery plans and operations for the delivery of a package of essential life-saving services.

Increase resilience

For the short to medium term, these plans will focus on making every health district safe, functional and resilient. This will include ensuring that the population has geographical and financial access to a defined package of essential clinical and public health services. This package needs to ensure community systems are strengthened and linkages to the formal health system built. WHO is also providing technical expertise to rapidly implement Integrated Disease Surveillance and Response (IDSR) systems and further develop capacities under IHR while ensuring these capacities are better integrated into local health systems. There are critical health workforce needs that will be addressed, taking into consideration a broader labour market lens, while governance, management, supply chain, information, health financing and accountability systems will also need to be strengthened.

Fast-track research and development for Ebola

Since the early days of the international health emergency caused by Ebola, WHO has consulted as a matter of urgency with independent medical researchers, manufacturers, regulators and public health experts, as well as representatives from the affected countries. It has gathered existing scientific data to build an evidence base for prioritizing research and development evaluations that could lead to effective health tools and products to support the response to the epidemic in the shortest possible time. In spite of the compressed research and development timeframe dictated by the urgent need for solutions, WHO's approach in this area has always been to advance a number of products to the testing phases on the basis of sound supportive evidence.

Extensive consultations have led to the prioritization of a shortlist of vaccines, therapeutics – including drugs, biologics and blood products – and diagnostics. These products are now either in, or are about to enter, clinical trials. To expedite the necessary ethical and regulatory approvals for clinical trials and potential deployment, WHO and its supporting partners have been working with the ethics committees and national regulatory authorities of the countries concerned to devise accelerated processes, such as joint reviews and real-time information exchange. WHO has also facilitated logistics and networks on the ground in the affected countries to operationalize clinical trials, and has provided technical support to partners and local communities. In March 2015, WHO launched an efficacy trial of one of the candidate vaccines in collaboration with the Guinean government, MSF and other partners.

In parallel, WHO is developing tools to support research and development via data repositories and information-sharing platforms. WHO has also worked with countries, partners and Ebola experts to define a prioritized research agenda. These will benefit not only the efforts in the current Ebola epidemic, but also in future epidemics and will further extend research and development into diseases for which no treatments are available today. WHO is also conducting a consultation to facilitate the management of biological samples from this outbreak, since they constitute an invaluable biological resource to be conserved and used ethically for maximum improvements to knowledge and interventions for future disease control.

Effective community engagement is central and critical for the successful roll out and management of EVD clinical trials. A key set of principles for conducting trials of new vaccines and therapies emerged from the lessons learned from HIV/AIDS. These highlighted the importance of engaging with families and communities to ensure that individuals know their rights, provide informed consent, are not subject to increased stigma and discrimination, and that myths and false information are dealt with early.

Finally, it is critical to review and assess the public health interventions carried out during the outbreak, in particular in large urban centres, to compare effectiveness and to draw lessons for future outbreaks.

National and international Ebola response coordination

WHO will continue to play an active role in the leadership, partner coordination and communications around the Ebola response both at the international level, through bodies such as UNMEER, GOARN and the Global Health Cluster, and at country level, through the National Ebola Response Centres. As the outbreak increasingly focuses on active surveillance, case finding and contact tracing, WHO's work will be adapted to support increased community ownership and the safe reactivation of essential health services and the strengthening of health systems for early recovery. Recognizing the planned transition of UNMEER by September 2015, WHO is also working to ensure it has the capacity and processes to manage the cross-agency response at that time.

Planning and resource mobilization

Through this transition WHO will continue to work closely with national governments, Member States, UNMEER and response partners to develop, review and evaluate international and national plans for the Ebola response, and will ensure that WHO's work plans are aligned accordingly. WHO will continue to develop resource mobilization strategies in coordination with the Multi-Partner Trust Fund managed by the United Nations Special Envoy of the Secretary-General and other emergency funding mechanisms, and will ensure the timely provision of technical and financial reporting to donors.

Information management

Critical to the response is transparent communication and reliable information management. Reporting systems have been established to analyse and track the epidemiological situation, and to monitor response activities. Regular analysis and reports on current epidemiological and response circumstances at district, national and international levels will continue to be provided. Epidemiological forecasts and response projections need to continue to be developed to inform strategic and operational planning. Information systems and processes need to be further strengthened to improve accuracy, quality and timeliness of reporting.

Financial and human resources

The Ebola response requires unprecedented financial and human resources. WHO will continue to develop and regularly review activity and human resource plans and budgets to ensure alignment with evolving strategic priorities. A significant challenge is to manage the sourcing, contracting, training and deployment of qualified staff to support country and field operations. Since March 2014, WHO has deployed over 1,250 experts through a variety of mechanisms to carry out the various critical response functions, such as surveillance, contact tracing, infection prevention and control, health and safety, laboratory diagnosis, case management, community engagement, social mobilization and anthropology. Coordinated by WHO, GOARN has been crucial in providing over 600 of these deployments in the current Ebola outbreak.

Logistics and operations support

Further work will establish and institutionalize international rapid response teams, which will include foreign medical teams for clinical management, diagnostics, logistics and infection prevention and control. Administrative procedures and pre-deployment training courses have been implemented to ensure teams are prepared and ready to be rapidly deployed when required.

Logistics and operations support remain essential. A reliable supply of consumables and equipment to bolster country and field operations must be maintained and long-term capacities established. The security of staff, accommodation and operational bases for country and field operations must also be maintained, including robust procedures and capacity for security risk assessments, and for dealing rapidly with threats to staff or facilities. This requires sufficient security staff, and the provision of radio, data and telecommunications among other resources. Transportation to support country and field operations will remain critical especially during the wet season.

WHO and the World Food Programme (WFP) are developing a joint operations platform to increase logistical capacity in Guinea, Liberia, and Sierra Leone. Under the terms of the agreement, WFP will provide field teams with the resources they need – computer equipment, phones, internet connectivity and vehicles – to carry out effective response operations. The joint partnership responds to the directive of WHO's Executive Board Special Session on Ebola to develop new ways to strengthen health emergency operations, and provides a model for collaboration in future for responding to emergencies with health impact.

Conclusion

In collaboration with our partners, WHO is determined to support the affected countries to reach zero cases of Ebola virus disease in West Africa and to facilitate the early recovery of the health sector. The successful strategies and lessons already learned in the fight against this devastating disease underpin the pragmatic approach and practical activities encompassed in this new strategic plan for 2015. Getting to zero cases through rigorous surveillance and extensive and thorough case finding, case investigation and management, and contact tracing can only be achieved with the vigilance and close collaboration of our partners and the governments of the most-affected nations. Most importantly, at the district and community levels we need to anticipate and pre-empt resistance, demanding new ways of working and behavioural adaptations of service providers.

The response efforts must continue in earnest because, without the elimination of Ebola, the planned reactivation of essential services disrupted by the epidemic and the future recovery of the countries' fragile economies and service infrastructures cannot successfully begin. WHO is working with its partners to make sure a positive legacy remains after this crisis; a legacy that encompasses strengthened health systems and a resilience and preparedness to face the future, whatever further public health challenges it might bring.

ANNEX 1: RESULTS FRAMEWORK

Outcomes / Outputs / Activities	Indicators				Implementing partners
	Description	**Baseline**	**Target**	**Source**	
Outcome 1. Stop transmission of the Ebola virus in affected countries	**Number of new confirmed Ebola cases**	Guinea: 51 (1/3/15) Liberia: 0 (1/3/15) Sierra Leone: 81 (1/3/15) Total: 132 (1/3/15)	0	Daily situation reports	
	Number of new confirmed Ebola deaths	Guinea: 32 (1/3/15) Liberia: 0 (1/3/15) Sierra Leone: 85 (1/3/15) Total: 117 (1/3/15)	0	Daily situation reports	
	Number of new community deaths testing positive for Ebola	Guinea: 17 (1/3/15) Liberia: 0 (1/3/15) Sierra Leone: 14 (1/3/15) Total: 31 (1/3/15)	0	Daily situation reports	
	Case fatality ratio for confirmed Ebola cases	Guinea: 66% (January 2015) Liberia: 50% (December 2014) Sierra Leone: 66% (December 2014)	<50%	Clinical investigation records	
Output 1.1. Strengthened district response operations *Key activities:* • Establish district level Ebola operations centres with clear operating procedures in all affected areas • Develop quarterly district plans adjusted to the specific epidemiological situation and context	Number of district level emergency Ebola operations centres with at least 70% of planned staff				
	Number of national rapid response teams established				

Outcomes / Outputs / Activities	Indicators				Implementing partners
	Description	Baseline	Target	Source	
• Establish capacity at national and district level to rapidly respond to new outbreaks • Establish coordinated cross border operations in priority border areas					
Output 1.2. Enhanced surveillance and contact tracing *Key activities:* • Establish active surveillance ensuring "zero weekly reporting" of suspected Ebola cases from key facilities and community leaders • Conduct integrated epidemiological case investigations to establish transmission chains and identify contacts • Systematically monitor contacts for 21 days, across national and international borders where required • Support the management of data systems to reliably record and share epidemiological data • Coordinate and ensure the quality of laboratory diagnostic capacities for Ebola	Number of contacts registered per confirmed case	Guinea: 13 (1/3/15) Liberia: 62 (1/3/15) Sierra Leone: 28 (1/3/15)	>10	Weekly situation reports	
	Percentage of samples tested within one day of collection	Guinea: 98% (February 2015) Liberia: 85% (February 2015) Sierra Leone: 88% (February 2015)	100%	Laboratory database	
	Percentage of new confirmed cases from registered contacts	Guinea: 49% (1/3/15) Liberia: 0% (1/3/15) Sierra Leone: 78% (1/3/15)	100%	Weekly situation reports	
	Percentage of credible alerts investigated within 24 hours		100%	Weekly situation reports	
Output 1.3. Community engagement mainstreamed *Key activities:* • Ensure key community groups and stakeholders (e.g. religious and political leaders, women and youth groups) are represented in district planning and operations • Ensure factors and causes of resistance are investigated, monitored and mitigation plans developed • Train response teams in trust building and communication skills so they are sensitive to and can adapt to community	Number of security incidents or other forms of refusal to cooperate	Guinea: 4 (1/3/15) Liberia: 1 (1/3/15) Sierra Leone: 4 (1/3/15)	0	Daily situation Reports	
	Percentage of security incidents or other forms of refusal to cooperate investigated within 72 hours		100%	Post investigation reports	
	Percentage of district plans that that specifically take into account		100%	District plans	

Outcomes / Outputs / Activities	Indicators				Implementing partners
	Description	**Baseline**	**Target**	**Source**	
context when responding • Develop capacity at district level of community engagement and social mobilization staff to design and execute targeted and evolving strategies in high transmission areas • Develop national capacity to provide psycho-social support to affected communities and Ebola survivors • Develop strategies to engage survivors in planning actions to address stigma in health care and social settings • Establish mechanisms to document episodes of discrimination towards survivors with networks of survivors, religious leaders, women's groups, young people, and people living with HIV	social and cultural context				
	Level of trust and satisfaction expressed by community groups and service users in Ebola response activities		Qualitative increase	Focus group discussions & key informant interviews	
	Number of unsafe burials reported	Guinea: 16 (1/3/15) Liberia: 0 (1/3/15) Sierra Leone: 16 (22/2/15)	0	Daily situation Reports	
Output 1.4. Optimized case management *Key activities:* • Manage deployment of foreign medical teams • Coordinate the establishment/disestablishment, distribution and capacity requirements of Ebola treatment centres and community care centres • Assess Ebola treatment centres and community care centres and provide training and guidance to ensure the highest standard of care and clinical management practices, including the protection of health workers • Develop best practices and guidelines for managing the care of Ebola survivors • Establish and maintain feedback mechanisms to ensure families are regularly informed of health status of family members in Ebola treatment centres	Time between symptom onset and case isolation	Guinea: 3.3 (January 2015) Liberia: 2.8 (November 2014) Sierra Leone: 2.9 (December 2014)	<2 days	Clinical investigation records	
	Number of newly infected health workers	Guinea: 1 (1/3/15) Liberia: 0 (1/3/15) Sierra Leone: 0 (1/3/15) Total: 1 (1/3/15)	0	Daily situation Reports	
	Percentage of IPC-assessed Ebola treatment units (ETUs) that met minimum infection prevention and control standards	Guinea: 100% (2/2) (January 2015) Liberia: 100% (12/12) (February 2015) Sierra Leone: 78% (14/18) (January 2015)	100%	IPC Reports	

Outcomes / Outputs / Activities	Indicators				Implementing partners
	Description	**Baseline**	**Target**	**Source**	
Outcome 2. Prevent new outbreaks of the Ebola virus in new countries	**Number of secondary transmission chains established from an imported Ebola case**		0		
Output 2.1. Active surveillance and rapid response capacities in bordering countries *Key activities:* • Establish Ebola operations centres and active surveillance in areas bordering Ebola-affected countries and in major cities • Provide the general public with accurate and relevant information on the neighbouring Ebola outbreak and measures to reduce the risk of exposure • Provide training in community engagement skills for frontline response staff, in particular rapid response teams, case investigators and contact tracers • Identify and prepare isolation units where suspect and probable Ebola cases can be properly investigated and managed • Establish processes for rapidly testing diagnostic specimens at a WHO-recognized laboratory	Number of bordering countries with EOC established		4		
	Number of districts reporting alerts/suspect cases weekly to the national system		>90%		
	Number of bordering countries with an isolation unit ready and available to respond to a suspect Ebola case		4		
	Number of countries with a standard operating procedure for rapidly shipping diagnostic specimens to a WHO-recognized laboratory		4		
Output 2.2. Essential readiness capacities in the high priority countries established *Key activities:* • Conduct assessments and simulation exercises to ensure capacities exist to detect, investigate, report and respond to Ebola cases • Support countries to increase essential capacities where required • Establish platform for sharing of Ebola preparedness and policy information	Number of EVD trainings conducted addressing country-specific priority training needs		At least 1 per high priority country		
	Number of simulation exercises conducted		At least 1 per high priority country		

Outcomes / Outputs / Activities	Indicators				Implementing partners
	Description	**Baseline**	**Target**	**Source**	
Output 2.3. Global alert and rapid response capacities established *Key activities:* • Ensure global monitoring and event-based surveillance and reporting of signals of potential Ebola cases through IHR national focal points and independent monitoring and risk assessments • Deploy international rapid response teams to investigate probable and confirmed Ebola cases and implement immediate containment measures	Percentage of new outbreaks for which an International Rapid Response Team was deployed		100%	FMT WHO website, GOARN	
Outcome 3. Safe reactivation of essential health services and increasing resilience	**Percentage of high transmission countries where DTP3 vaccination coverage is restored to pre-Ebola levels**		100%		
Output 3.1. Safely reactivate health facilities in affected countries *Key activities:* • Develop safe triage guidance and toolkits for essential health services reactivation • Provide training to health workers on IPC standard precautions in essential services and community engagement • Assess existing health care facilities against minimum standards required for reactivation and coordinate the implementation follow up actions as required • Implement the Integrated Disease Surveillance and Reporting (IDSR) systems at health care facilities	Percentage of non-Ebola specific, primary, secondary or tertiary health facilities assessed and meeting minimum standards of IPC		75%	IPC reports	
	Percentage of health workers trained per month on IPC in routine healthcare, Ebola preparedness and response		TBD	Training reports	

Outcomes / Outputs / Activities	Indicators				Implementing partners
	Description	**Baseline**	**Target**	**Source**	
Output 3.2. Rebuild short-term health workforce capacity *Key activities:* • Support emergency hiring and management plans to recruit critical national health workforce required for the reactivation of health services and core health systems functions • Support MOH and partners to improve health worker availability and timely health worker payments • Activate health clusters or their equivalent to ensure needs-based and sufficient foreign medical teams and expatriate health workers from supporting governments and NGOs to deliver essential health services as part of a national FMT establishment list • Provide in-service health worker training package on essential health services • Provide ongoing training for front line primary care in communities and districts to detect and rapidly respond to suspect and probable Ebola cases	Percentage of districts that have at least 80% of planned health workers in place to deliver basic package of essential healthcare services		100%	FMT coordinator	
	Percentage of health workers present on the day of a facility assessment		100%	IPC reports	
	Percentage of health workers that received their salaries and allowances in the last 30 days		100%	Monthly facility reports, civil service payment records	UNDP
Output 3.3. Basic package of essential health services re-established *Key activities:* • Re-establish essential health service programmes (malaria, EPI, RMNCH, essential medicines and mental health) to pre-outbreak levels in the three most-affected countries • Develop strategies to reduce out of pocket costs of accessing the basic packages of essential health services	Percentage of districts that have nationally agreed basic package of essential healthcare services provided to at least pre-Ebola levels		100%		
	Percentage of districts where user access fees for agreed basic package of essential healthcare services have been suspended during early recovery period		100%		

Outcomes / Outputs / Activities	Indicators				Implementing partners
	Description	**Baseline**	**Target**	**Source**	
Output 3.4. Support planning for the establishment of future resilient health systems *Key activities:* • Develop comprehensive costed plans to build resilient health systems in each of the three countries, including community systems strengthening • Integrate IHR and IDSR work and capacities into national health systems	Number of countries with a comprehensive costed plan to build a resilient health system		1 per country		
Outcome 4. Fast-track research and development	**Number of interventions prioritized through a WHO process submitted to field evaluation**		At least 6		
Key activities: • Develop prioritized Ebola research agenda • Develop procedures to accelerate regulatory decisions on clinical trials of proposed Ebola-related medical products through the facilitation, by WHO, of joint review by groups of national regulatory authorities (NRAs) • Establish a community engagement advisory group to inform the science committee					
Output 4.1. Ebola vaccines fast-tracked *Key activities:* • Consolidate summary of the safety and immunogenicity of first-generation Ebola vaccines • Develop procedure for WHO emergency use assessment and a list of vaccines for procurement in the context of a public health emergency • Negotiate a consensus on the target product profile for an Ebola vaccine • Develop and implement community and health workforce engagement guidelines for vaccines	Number of Ebola-affected countries with a partners framework and collaborative plan for deployment of first-generation Ebola vaccines (GSK, Merck and J&J candidate vaccines) ready for implementation		3 (mid-2015)		

Outcomes / Outputs / Activities	Indicators				Implementing partners
	Description	Baseline	Target	Source	
Output 4.2. Ebola rapid diagnostic test fast-tracked *Key activities:* • Develop a procedure for emergency use assessment and a list of diagnostic tests for procurement in the context of a public health emergency • Establish standards preparations for the evaluation and comparison of diagnostic tools	Percentage of applications for evaluation of new rapid diagnostics for Ebola submitted to WHO that are assessed within 8 weeks for procurement by UN agencies		100%		
Output 4.3. Ebola drug therapies fast-tracked *Key activities:* • Coordinate independent and transparent process to evaluate potential drug candidates through the STAC EE3 • Develop a list of prioritized drug candidates for clinical investigation updated regularly on the WHO website • Establish a process for WHO emergency use assessment and a list of medicines for procurement in the context of a public health emergency	Percentage of interventions (of those that have cleared initial screening for minimum supportive evidence) reviewed and prioritized by the STAC EE within 8 weeks		100%		
Output 4.4. Ebola blood products fast-tracked *Key activities:* • Develop reagents to standardize Ebola convalescent blood products • Collect data on the efficacy of convalescent blood products against Ebola	Number of Ebola-affected countries with investment plans to strengthen national blood systems developed and implementation initiated		3 (by end 2015)		

Outcomes / Outputs / Activities	Indicators				Implementing partners
	Description	**Baseline**	**Target**	**Source**	
Outcome 5. National and international Ebola response coordination	**Percentage of funding available against planned resource requirements**		>80%		
Output 5.1. Leadership, partner coordination and communications *Key activities:* • Provide leadership and coordinate partners for Ebola response activities in international and national forums • Develop, review and evaluate national and international plans for Ebola response, ensuring WHO's work plans are aligned accordingly • Communicate the progress of the disease and the interventions put in place to combat it via regular communications with traditional and social media outlets • Develop resource mobilization strategy in coordination with UNSG and other emergency funding mechanisms, and ensure provision of timely technical and financial reporting to donors • Coordinate key international technical support groups, such as the GOARN network and foreign medical teams	Resource mobilization strategy developed in coordination with UNSG and other emergency funding mechanisms		Yes		
	WHO workplans aligned with national and international plans for Ebola response		Yes		
Output 5.2. Information management *Key activities:* • Establish reporting systems to assess the epidemiological situation and monitor response activities • Provide regular analysis and reports on the epidemiological and response situation at district, national and international levels • Develop epidemiological forecasts and response projections to inform strategic and operational planning • Strengthen information systems and processes to improve accuracy, quality and timeliness of information reporting	Country situation reports produced on a daily basis until Ebola transmission interrupted		Yes		
	Global situation report published on a weekly basis		Yes		

Outcomes / Outputs / Activities	Indicators				Implementing partners
	Description	Baseline	Target	Source	
Output 5.3. Financial and human resource management *Key activities:* • Develop and regularly review activity and human resource plans and budgets aligned with strategies • Allocate and audit financial resources according to rules and procedures for accountability and compliance • Manage the sourcing, contracting, training and deployment of human resources to support country and field operations • Ensure agreements for medevac are in place and services are available to support staff well-being	Country operations with at least 80% of planned staffed deployed	70%	80%		
Output 5.4 Logistics and operations support *Key activities:* • Ensure the reliable supply of consumables and equipment to support country and field operations • Establish and maintain secure bases for country and field operations, including the provision of radio, data and telecommunications • Manage and maintain transportation fleet to support country and field operations	Percentage of country and field bases with appropriate radio, data and telecommunications capacity		100%		
	Percentage of districts where WFP-WHO joint operations platform has been established		60%		

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