



Photo: WHO/E. Kabambi

STRATEGIC RESPONSE PLAN

FOR THE EBOLA VIRUS DISEASE OUTBREAK IN THE PROVINCES OF NORTH KIVU AND ITURI

February – July 2019

13 February 2019

Contents

- 1. Introduction2**
- 2. Analysis of strengths and weaknesses of the response.....2**
 - Strengths.....2
 - Weaknesses3
 - Opportunities3
 - Threats.....3
- 3. Risk assessment.....4**
- 4. Current epidemiological situation.....5**
- 5. Objectives, strategic directions & planning assumptions7**
 - Main objective.....7
 - Specific objectives.....7
 - Strategic orientations.....7
- 6. Main strategies and activities revisited10**
 - 6.1 Strengthening coordination of the multisectoral response at different levels10
 - 6.2 Strengthening the information management system11
 - 6.3 Strengthening surveillance, active case finding and follow-up of contacts12
 - 6.4 Points of entry (PoE).....14
 - 6.5 Strengthening laboratory diagnostic capabilities.....15
 - 6.6 Case management of confirmed and suspected cases15
 - 6.7 Survivors’ programme.....17
 - 6.8 Strengthening Infection Prevention and Control Measures (IPC).....17
 - 6.9 Vaccination of at-risk groups.....19
 - 6.10 Safe and dignified burials (SDB)20
 - 6.11 Risk communication, social mobilization and community engagement20
 - 6.12 Psychosocial care.....22
 - 6.13 Access to health services.....22
 - 6.14 Preparation of health zones and provinces adjacent to epidemic foci24
 - 6.15 Strengthening workforce coordination and training through the establishment of the Ebola Centre of Excellence (ECE)25
 - 6.16 Human resources, operational support and logistics26
 - 6.17 Security risk and political risk management27
 - 6.18 Food distribution28
- 7. Monitoring and Evaluation29**
- 8. Budget30**
- Annex: Table of key performance indicators.....32**
 - CONTACTS.....33

1. Introduction

The tenth epidemic of Ebola virus disease (EVD) in the Democratic Republic of the Congo, affecting the provinces of North Kivu and Ituri, was declared by the Ministry of Health on 1 August 2018. The initial strategic response plan (SRP-1) covering the period up to 1 October 2018 and then the second strategic response plan (SRP-2) for the period from October 2018 to January 2019 facilitated deployment of the important resources of the Congolese Government and its partners.

Despite the complexity of this epidemic (dense and mobile population, insecurity, community resistance and risk of spread at the national and regional levels), the implementation of the interventions made it possible to significantly reduce the spread of the outbreak in the initial epicentres of Mangina / Mandima and Beni and stopped transmission in some secondary focal points like Tchomia, Masereka and Mutwanga.

Nevertheless, since the beginning of December a significant increase in the incidence of new cases has been observed particularly along the corridor towards the large urban center of Butembo (health zones of Butembo and Katwa) and beyond in the zone of Kayna health center located about 150 km from Goma. In addition, active outbreaks have emerged to the north, particularly in the health zones of Komanda and Oicha.

The third strategic response plan (SRP-3), which covers February through end July 2019, considers the salient points and recommendations made during the operational review of the implementation of the SRP-2 and other guidance based on lessons learned and risk analysis.

2. Analysis of strengths and weaknesses of the response

STRENGTHS

- Functionality of the response coordination mechanisms facilitate the engagement of partners; exchange and the dissemination of information relating to the implementation of the various pillars of the response daily; and good coordination between the partners.
- Establishment of functional Ebola Treatment Centres (ETCs) that adhere to international standards; laboratories equipped to deliver rapid diagnosis; treating patients with new therapeutics.
- Functionality of many points of entry and control stations (PoE/CSs) that make it possible to report confirmed alerts.
- Availability and rapid deployment of vaccine (with 73 298 people vaccinated as at 27 January) that help to limit the spread of the disease among the many contacts, and contacts of contacts in confirmed and probable cases and among front-line health workers.

WEAKNESSES

- Weak communication, information sharing and decision making between the sub-coordination groups and the strategic coordination commissions, and absence of a detailed workplan setting out in detail for all actors who does what, where, when and how;
- Weak perception of the severity of the epidemic within the affected communities and low involvement of local health workers within the response structures and activities, including low notification of alerts;
- Low number of community deaths tested; weakness in the initial identification of contacts and follow-up of contacts, with a high number of contacts lost to follow-up;
- Absence of a conflict resolution strategy for reported security incidents;
- Weak Infection Prevention and Control (IPC), mainly because of the lack of standardization of the IPC intervention package, insufficient training of staff and the precariousness of medical infrastructures and equipment;
- High number of children under five years of age and women affected by the disease, indicating insufficient consideration of the maternal, infant and adolescent health component in the context of this response;
- Weak information management system for the response, with fragmented databases, incomplete information and information in silos;
- Insufficient preparedness capacity in high-risk health zones not yet affected by the epidemic;
- Weak integration of the response in the context of a complex humanitarian crisis.

OPPORTUNITIES

- Awareness of the value of using local social media networks to communicate information about the response.
- Awareness by all actors that the response goes beyond the scope of the public health framework and must consider other important aspects, particularly security.
- The engagement of many partners working closely with national teams.
- The opportunity to strengthen many parts of the local health system over the long term.

THREATS

- The underlying social, political and security context, leading to the reluctance, refusal and resistance from the community about adhering to the measures recommended by the response teams.
- Disruption of response activities and attacks on response personnel and structures during community events because of the security situation.
- High mobility of the population.
- Many of the health facilities do not comply with IPC measures, triage and isolation, and do not notify alerts.
- Late payments by frontline providers, which affects the quality of the execution of activities.

3. Risk assessment

As of 27 January 2019, 736 cases of Ebola (of which 682 were confirmed) were reported in 18 health zones. The risk of transmission at the national level remains very high because the affected provinces are connected to the rest of the country by air, river and road. The risk of transmission at the regional level is also high. Indeed, areas affected by the epidemic share borders with Uganda and neighbouring Rwanda, where there is a high cross-border migration flow arising from trade, access to health care, family visits and humanitarian visits.

Risk factors include mainly:

- Lack of security in the two affected provinces: the overall security situation has deteriorated since the epidemic began and hinders implementation of the response activities.
- Pockets of reluctance, refusal or community resistance continue to be reported, particularly in the Katwa, Komanda (Bwanasura, Kazaroho), Mangina (Aloya, Canteen) and Butembo health zones. Regular evaluations were conducted, making it possible to take corrective measures.
- Significant public health challenges are noted, characterized mainly by a weakness in the initial identification and monitoring of contacts, the precariousness of health structures – in particular around the parameters of the IPC – contacts lost to unresolved transmission, late arrival of patients at Ebola treatment centres (ETCs), low notification of community alerts and deaths. The low engagement of traditional practitioners was another challenge.
- Significant logistical challenges: the geographical spread of the response as well as the security situation in the region represent a major challenge for the organization and implementation of the response. These require significant resources especially regarding the deployment of experts and transportation of materials and equipment.
- Dense and mobile populations: the populations of North Kivu and Ituri are estimated at 6 655 000 and 3 650 000 inhabitants respectively¹. Aside from displacement for humanitarian reasons, the high mobility of these populations is mainly related to micro-commerce activities and family visits.

¹ Source: Ministère du Plan, 2017, Annuaire Statistique 2015.

4. Current epidemiological situation

As of 27 January 2019, the cumulative number of cases was 736 (682 confirmed and 54 probable) including 459 deaths, a case fatality rate of nearly 62% among confirmed and probable cases. Case fatality among confirmed cases was 67%.

Of 430 cases among women, 62% (267) of cases were aged 15-49 years; i.e. child bearing years.

Children represent a disproportionate number of cases compared to the previous epidemic. Thirty percent (n = 220) of the cases were under the age of 18, and 16% (n = 115) were young children and infants under 5 years of age.

In total, 65 health workers have been affected by Ebola virus disease.

Figure 1: Confirmed and Probable Cases and Deaths of Ebola virus disease by Sign Start Date, May 1, 2018 to January 27, 2019, North Kivu and Ituri Provinces

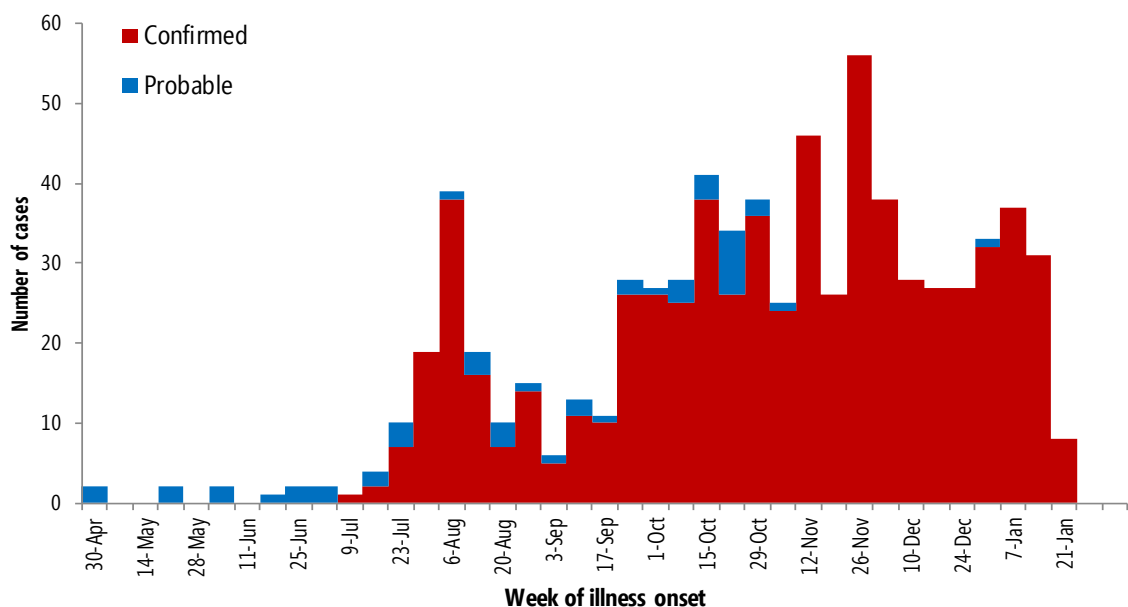
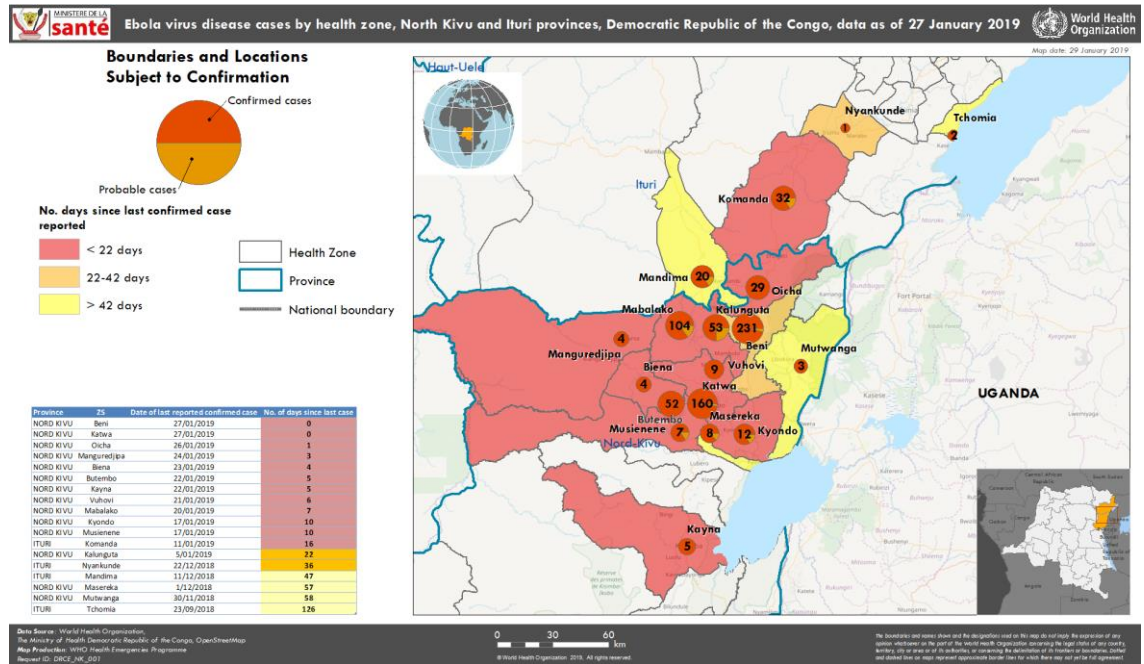


Figure 2: EVD cases from 1 May 2018 to 14 January 2019, in the provinces of North Kivu and Ituri, the Democratic Republic of the Congo



The majority (74%) of cases were reported in four health zones, namely Beni (n = 231, 31%), Katwa (n = 160, 22%), Mabalako (n = 104, 14%) and Butembo (n = 52, 7%). Fourteen other health zones also reported confirmed and/or probable cases.

It should be noted however, that the response has significantly reduced the epidemic curve in the initial Mangina/Mandima and Beni foci and stopped transmission in secondary foci such as Tchomia, Masereka, Mutwanga and Komanda.

5. Objectives, strategic directions & planning assumptions

MAIN OBJECTIVE

Interrupt the transmission of Ebola virus disease in North Kivu and Ituri Provinces and prevent its spread to other provinces of the Democratic Republic of the Congo and neighbouring countries.

SPECIFIC OBJECTIVES

- Accelerate ownership of the response by the communities, their leaders and local health system actors.
- Establish a functional alert system in the community and health structures.
- Strengthen the effectiveness of coordination mechanisms and interactions between commissions and structures involved in the response.
- Establish a deployment plan and a management and capacity building system for the personnel involved in the response.
- Strengthen data analysis at all levels for better informed decision making that can guide multidisciplinary interventions.

STRATEGIC ORIENTATIONS

The SRP-3 will build on a series of new strategic directions that capitalize on lessons learned under the scope of SRP-2. Its main points can be summarized as follows:

Programmatic aspects

- Developing an implementation and accountability framework that will complement the SRP-3 by clarifying how the strategies and activities of the main pillars will be implemented, the outputs/deliverables, timing and roles and responsibilities of all key stakeholders.
- Anchoring the EVD response to the existing health system structures: this implies that the central, provincial and local health sector steering and service delivery structures are involved in the response. The instructions on the roles and responsibilities of each structure will be widely disseminated and their implementation will be followed systematically. Each structure will ensure that its health services and functions in support of the response are fully engaged in their activities to contribute effectively to the achievement of the objectives of the response.
- Strengthening the capacities of response actors at all levels, particularly at the provincial and local levels, to enable them to effectively carry out their assigned missions.

- Strengthening the outbreak strategic coordination team, which has been transferred to Goma and will be equipped with optimal information management, data analysis and rapid response capabilities. This team will also be responsible for other missions, including setting up a training centre to upgrade skills and mentor responders, organize regular operational and thematic reviews, supervision of sub-coordination teams and health zones involved in the response and document good practice.
- Incorporating the strategy for monitoring displaced, unseen and lost contacts, including reinforcement of priority points of entry, setting up a mobile team within the sub-coordination teams, and improving community engagement.
- Taking into consideration the growing number of survivors to develop strategies to better protect them and involve them in the response.
- Intensifying activities to ensure strong community engagement and ownership of key community response measures.
- Including the maternal and child health component as well as the humanitarian aspects according to the pillars of the response².

Concept of operations

Although the two provinces are in response mode, the lessons learned from the operational review have demonstrated the need to adapt response capacities according to the intensity of transmission of the virus and the risks:

- In health zones identified as real "hotspots" with intense transmission underway, full response capacity will be established with the deployment of a multi-disciplinary team of national and international experts to support health zone management teams (HZMT) and the health centres' multidisciplinary teams. This comprehensive response is currently in place in the Beni, Mandima / Mabalako, Komanda, Butembo / Katwa and (exceptionally) Goma sub-coordination teams. Commissions are in place to facilitate the response as well as the establishment of an ETC.
- In high-risk health zones where transmission is ongoing or where there is a high risk of transmission, a response team will be set up and maintained on site.
 - In the Tchomia, Lubero, Kirumba, Manguredjipa and Nyankun health zones, these multidisciplinary teams will be composed of national and international experts in contact with the main pillars of response.

² Humanitarian activities that do not have the direct objective of interrupting the chain of transmission of the virus but are nevertheless essential to the well-being of the populations of North Kivu and Ituri (contribute to an enabling environment for the EVD response teams that enable continuity after the epidemic has ended) are included in the 2019 Humanitarian Response Plan and the Northern Operational Plan Kivu and Ituri. Please find both documents:

<https://www.humanitarianresponse.info/fr/operations/democratic-republic-congo/document/rd-congo-plan-de-r%C3%A9ponse-humanitaire-2019>
and rdc.humanitarianresponse.info.

- In the Musienene, Oicha, Mutwanga, Kalunguta, Vuhovi Biena, Kyondo, Kayna and Alimbongo health zones where it is not possible to position international staff, a team of national experts will be present to support the health zone teams. Nevertheless, these teams will benefit from the support of mobile teams composed of national and international staff from the closest sub-coordination team to support response interventions.
- In the health zones not yet affected, experts will be deployed to train and support HZMT and health centre teams in the implementation of appropriate response activities (surveillance for alerts and follow-up of contacts; risk communication and social mobilization for awareness and community alert (reporting); vaccination of front-line staff).

Strategic coordination will be established in Goma, with an Emergency Operations Centre (EOC) that will monitor implementation of the operations via links with the EOCs of the sub-coordination teams and direct contacts with the teams of the health zones.

Planning assumptions

- All health zones (HZ) in the two affected provinces will be put in response mode, due to the current number of HZs already affected by the outbreak and the known risks of geographical spread.
- A six-month period has been agreed for the implementation of measures to contain transmission in the two affected provinces. The proposed six-month duration considers experience from the response in the Beni agglomeration and the intensity of the outbreak in Butembo/Katwa.
- Flexibility in the execution of the plan and budget is necessary to be able to consider the evolving dynamics of the epidemic and make the necessary adjustments.
- It is important to note that in the event of EVD transmission in the city of Goma, this would mark a radically different stage in this epidemic. The possibility of this occurring justifies the development of a contingency plan given the serious risks of national, regional and international spread of the epidemic. Goma maintains regular air connections with the major cities of the Democratic Republic of the Congo, neighbouring countries and other air hubs in Africa such as Nairobi and Addis Ababa.
- At this stage, it is difficult to make a realistic projection of the number of cases there could be because of various constraints, such as the fact that currently many cases are not linked with known chains of transmission, and that many cases are linked to lost contacts.

6. Main strategies and activities revisited

6.1 Strengthening coordination of the multisectoral response at different levels

Coordination mechanisms and collaboration among the various coordinating bodies will be strengthened to improve the effectiveness of the response. The aim is to improve interactions between the coordination structures and the commissions on common and cross-cutting issues, and to ensure more effective communication with all implementing partners.

The response is mainly organized at two levels: the national level in Kinshasa and the operational level.

- In Kinshasa, there is the Strategic Committee, chaired by the Minister of Public Health and the National Coordination Committee (NCC).
- At the operational response level, there are the Strategic Coordination and Sub-coordination teams, supported by the Commissions and Sub-Commissions that direct the main pillars of the response.
- The National Action Monitoring Unit and the Action Monitoring Unit (previously called the Strategic Planning Unit) at the operational level ensure effective coordination and follow-up of the decisions and recommendations made at both levels and good flow of information between the two levels.

The operational review noted communication deficits between the strategic coordination and sub-coordination and national coordination levels, lack of harmonization between some tools, weak follow-up in the implementation of decisions and lack of linkages between the response actors and those of the local health systems. In addition, local actors including politico-administrative authorities, community leaders and civil society have not been systematically involved in the coordination structures.

The following key activities will be carried out to strengthen the functionality of all the coordination and sub-coordination of the response and their interactions:

- Organizing the move of the strategic coordination team in Goma and set it up so that an EOC is in place and functional as soon as possible; the establishment of teams and means for rapid intervention; the launch of the activities at the Ebola training centre; implementation of the new information system; development of a human resources deployment plan; organization of supervision and monitoring and evaluation activities.
- Ensuring functional coordination mechanisms according to terms of reference and defined means of interaction.
- Ensuring daily analyses of the evolution of the response at all levels with up-to-date information to improve real-time operational planning.
- Setting up a timeline for monitoring recommendations through coordination.
- Linking morning coordination meetings, strategic coordination meetings and national coordination meetings.
- Strengthening collaboration between the response and the humanitarian coordination actors through regular dialogue among all concerned.

6.2 Strengthening the information management system

Ebola data and information management will focus on a systematic approach to the collection, analysis, reporting, and interpretation of key operational data from all partners involved in the response. With multi-level reinforcement, the analysis of the quality of intervention activities will be continually reviewed in the context of the current epidemiological situation, challenges, threats and emerging issues.

The information management strategy will be implemented under the leadership of the Ministry of Health, with the collaboration of all partners supporting Ebola response operations. Monitoring data collection will focus on the most recent information related to the health status of the population (surveillance and alert), contact research and monitoring, infection prevention and control, immunization and other key pillars, such as community engagement, psychosocial support activities, and resources available to support and implement the response.

Four major axes are defined through the new information management strategy:³

- Implementation of an operational information management model that needs to be integrated into the Strategic Coordination and must go beyond the framework of responding organizations, and that supports the collection and analysis of operational data at sub-coordination level.
- Improving the quality of the information collected for better operational and strategic decision making through the harmonization of collection tools and the implementation of a robust unique identifier system to facilitate the integration of disparate databases (e.g. case data, contact search, burials, family notification, laboratory data).
- Improving capacities of staff for collection, analysis, and management of data and information.
- Strengthening data governance, which is essential in the context of this complex emergency.

The information products listed below, developed and published in accordance with this strategy, aim to provide a broader view of the Ebola epidemic, including more in-depth epidemiological analyses:

- Dashboard of Key Performance Indicators
- Evaluation of operational activities outputs
- Weekly dashboard on the evolution of the Ebola outbreak
- Mapping the activities of the organizations participating in the response
- List of partners
- Summary of financial flows

³ Democratic Republic of the Congo EVD response information management and operational monitoring strategy, 22 January 2019.

6.3 Strengthening surveillance, active case finding and follow-up of contacts

Surveillance provides reliable data to ensure early detection and isolation of new cases and prevent the spread of the epidemic. The key activities to be implemented are to ensure the increase of alerts, the rapid investigation of validated alerts and cases, the listing and monitoring of contacts, and active case finding.

In implementing the current approach to surveillance and active case finding, the following is noted: alerts come from several sources, including EWARS, community leaders, surveillance teams and IPC teams conducting active case-finding activities in health facilities. The number of alerts and investigations within 24 hours has increased since January 2019 in most outbreak areas.

Weaknesses persist, however, in particular low involvement of health professionals (healthcare providers, traditional practitioners) in surveillance activities and the inadequacies of community-based surveillance, mainly because of the inappropriate profiles of community groups involved in the response.

The priority activities below will complement ongoing actions:

- Expand the definition of alerts and suspected cases to include contacts of confirmed and probable cases who are ill but do not present fever. Analysis of the data on 1 January shows that 194 cases out of 599 confirmed cases (68%) showed fever at the time of case notification.
- Train and supervise staff involved in surveillance in health facilities (*Formation Sanitaire*) (*FOSA*) and in communities (*Rélais communautaires*) (*RECOs*), community leaders and actors/influencers)
- Strengthen collaboration between surveillance and immunization teams to conduct more in-depth case and contact list investigations, as well as with community engagement teams to address the challenges of community resistance.

Contact tracing is an essential measure to control an outbreak of EVD. It enables new cases to be identified as quickly as possible to increase the chances of survival of these patients through early management, and to limit transmission within the community and thus reduce the risk of secondary transmission.

However, contact tracing in the context of the current epidemic remains difficult due to a series of challenges related to the identification of all contacts in an urban and highly mobile population, listing all contacts in health care facilities without patient registers, and community resistance and contacts avoiding surveillance teams.

The exhaustive identification of high-risk contacts during case investigations has been a critical weakness in the response to date. At the same time, a significant proportion of identified high-risk contacts are displaced or lost to follow-up, resulting in a significant risk of secondary transmission and spread to new geographical areas.

Recent data show that the proportion of known contact cases improved from 24% to 63% between October and December 2018, however this proportion dropped sharply in mid-January to around 10% caused by the disruption of contact tracing activities arising from security and political issues.

To contain the epidemic, a strengthened strategy for monitoring displaced high-risk contacts or contacts that have been lost to follow-up has been developed. This includes:

- Mobile surveillance teams dedicated to finding contacts that have not been seen, and those lost to follow-up.
- A coordination, monitoring and analysis unit at the level of each sub-coordination group dedicated to the analysis of unidentified, lost and displaced contacts.
- Strengthening already existing measures for tracing unidentified and lost contacts at the sub-coordination level.
- Reinforcing psychosocial support measures or other support for identified contacts to encourage them to fully participate in the contact tracing programme
- Participation of civil protection, UNPOL and the National Intelligence Agency (*Agence Nationale de Renseignements (ANR)*) in tracing lost and displaced contacts.
- Training strategic coordination team members on the use of CommCare software and providing cell phones/tablets and phone credits for monitoring community workers involved in contact tracing.
- Adapting the definition of the ratio "contact tracer/number of contacts to be followed each day" according to the situation as it evolves.

6.4 Points of entry (PoE)

At the time of publication of this report, a total of 76 PoEs and point of entry control stations (PoCs) have been established in North Kivu and Ituri Provinces. Nearly 30 million health screenings were carried out, resulting in more than 170 alerts. Subsequently, four alerts were confirmed to be cases of Ebola. Activities in PoEs and PoCs have also been used to disseminate EVD prevention and control messages to travellers and local communities, as well as to promote hand hygiene and contribute to the search for lost contacts.

Despite achievements, significant challenges continue to impact PoE/PoC response activities, namely the high number of new affected areas; absenteeism and strikes in many PoE/PoC related to repeated attacks on staff and late payment of workers; irregular water supply for handwashing activities; and poor quality of PoE/PoC performance data.

To address these challenges, in addition to ongoing interventions, key recommendations include:

- Protect large cities and prevent cross-border transmission by strengthening preparedness capabilities, particularly in Goma through a strategy to encircle the city – which has 11 points of entry – operating 24 hours a day.
- Strengthen activities by establishing priority PoE in hot spots and strategic pathways and by adapting a set of multisectoral interventions according to specific epidemiological situations with the establishment of a rapid response mechanism for PoE/PoC, using mobile teams to deploy quickly to new hotspots or to strengthen screening at strategic points, such as markets, travel agencies, transport agencies and car parks.
- Better management of remuneration for frontline workers and provision of water for continuous handwashing and surface decontamination at all PoE/PoCs.
- Integrate contact tracing into strategic PoE/PoC activities, which will operate 24/7 with the support of security staff, to facilitate the identification of missing and lost contacts.
- Establish closer links with the existing Health Zone Management System through close collaboration with the Health Zone Administration and knowledge transfer to local health actors.
- Strengthen cross-border collaboration through regular meetings, sharing of surveillance data and development of standardized approaches for case management and referrals in border areas.

6.5 Strengthening laboratory diagnostic capabilities

The diagnosis of the disease is conclusive only if the samples analyzed in the laboratory prove positive for the Ebola virus. The deployment of mobile laboratories in the affected provinces can accelerate the confirmation of diagnosis and improve the effectiveness of epidemiological investigations.

With the support of the National Biomedical Research Institute (*Institut National de Recherche Biomédicale (INRB)*), laboratory capacity has been established in all major operations centres, including Beni, Butembo, Mangina, Tchomia, Bunia and Goma through the deployment of GenXpert machines. Through daily reports, laboratory capacity is monitored to ensure that they are all able to accommodate the number of samples collected. GenXpert machines recently deployed in Beni and Butembo increase the capacity of daily tests to 90 and 60 samples per day respectively.

Key activities:

- Continue supporting the operation of the seven laboratories in reagents, consumables and materials for the diagnosis of EVD and differential diagnosis of yellow fever, dengue, chikungunya, and for haematology, biochemistry and parasitology.
- Acquire four GenXpert mobile laboratories (two on reserve and two for training purposes).
- Organize sample management (sampling, storage, packaging and transport).
- Train new teams of laboratory technicians in EVD diagnosis.

6.6 Case management of confirmed and suspected cases

The goal of clinical care for EVD patients is to provide safe, high quality care and individualized patient-centred care in a biosecurity environment to minimize the risk of spreading the virus to other patients or health workers.

During this outbreak, ETCs were established in Mangina, Beni, Makeke, Butembo, Tchomia, Katwa and Komanda. The ETCs varied in size (number of beds) depending on the dynamics of outbreaks with the largest hosting 86 beds (Butembo ETC set up with support from Doctors Without Borders (*Médecins Sans Frontières (MSF)*). In general, ETCs have two patient care areas: one for suspected patients and one for confirmed patients. This is necessary to ensure strict biosecurity rules.

However, increased surveillance in communities and active case finding in health facilities has increased the number of suspected cases requiring the construction of additional transit centres (TCs), where suspect patients can be treated until the results of their tests are obtained. Thus, confirmed patients are quickly transferred to the ETC for appropriate treatment (including enrolment in the therapeutic test protocol). Finally, the use of "CUBE," clinical tests and on-site biochemistry, represents a major advance in the clinical care of patients admitted to ETCs.

The operational review noted some weaknesses: the functionality of the ETCs is dependent on the resources of the partners (inputs, payment of staff and duration of supervision); insufficient supply of paediatric medicines; the lack of standardization of the clinical protocols in the administration of care in the different ETCs and insufficient follow up support for non infected patients that left ETCs.

To continue the clinical care services during this epidemic, it is necessary to maintain functioning of the ETCs in the health zones where transmission continues (Mangina, Beni, Butembo, Katwa, Komanda) as well as the TC of Beni and Bwanasura, and ensure that essential medical equipment, supplies and trained personnel (doctors, nurses, hygienists, social workers, psychologists, managers, logisticians, and pharmacists) remain in place.

In addition, it is necessary to establish clinical care teams that can be rapidly mobilized to optimize the delivery of rapid clinical care to suspected and confirmed patients in safe and biosecure environments in the newly affected health zones. The goal of these teams would be to be able to open TC or ETCs within 7 days, faster than the current practice. The type and size of new facilities will depend on the location, proximity of an existing ETC, and the security level of the area and access roads.

Key clinical care activities:

- Continue to support the Mangina, Beni, Butembo, Katwa, Komanda and Goma ETCs, with the possibility of opening at least 3 other ETCs depending on the development of the outbreak.
- Continue to support the TCs in Beni, Bwanasura and Kayina, with the possibility of opening additional TCs according to the evolution of the outbreak.
- Rapidly develop up to five rapid response clinical care teams.
- Ensure quality of care using validated patient care protocols, including implementation of experimental therapies, optimal supportive care, and nutritional and psychosocial well-being and appropriate care protocols for pregnant women and children.
- Facilitate training of national teams through training and monitoring by assigning at least one trainer per ETC site.
- Continue to provide clinical care to health staff after a risk of infection or confirmed infection.
- Maintain basic medical equipment and supply chain to provide clinical care to new patients (PEC kit), with a total of three kits available at all times.
- Provide nutrition care and counselling by providing nutritional inputs, technical assistance and counselling to patients.

6.7 Survivors' programme

The objective of this programme is to ensure an integrated and harmonious management of the problems that affect people cured of Ebola disease by integrating the clinical, screening and psychosocial dimensions. This service is part of the existing health structures and is free for people cured of Ebola.

People cured of Ebola can develop medical and psychological complications. These people need support when they return to their communities to minimize the risk of stigma and post-EVD complications. Given the variable duration of virus persistence in men's seminal fluid, the risk of sexual transmission, though limited, exists. Therefore, monitoring people who have been cured becomes a priority to contain all potential risks, including those of sexual transmission.

For these reasons, integrated and multidisciplinary monitoring is essential. The proposed programme, designed for a one-year period, plans to help survivors restore their health and livelihoods through food assistance, and is coordinated by the Ministry of Health and supported by different partners.

The different procedures and data sheets used in this programme were developed as part of the response to the Ebola outbreak in Equateur Province in 2018. These documents have been validated by experts from the Ministry of Health, INRB, ALIMA (Alliance for International Medical Action), UNICEF and WHO.

The programme is organized around three axes:

- Clinical management of people cured of Ebola virus disease
- Screening and counselling on the prevention of secondary sexual transmission
- Psychosocial care of people cured of Ebola virus disease

6.8 Strengthening Infection Prevention and Control Measures (IPC)

The goal of IPC in health facilities that are not designated as formal Ebola treatment units is to ensure the continued trust of health workers and the general public in the health system, and to avoid the introduction and transmission of the Ebola virus through the establishment of a "safety culture".

To achieve this goal, a coordinated, multidisciplinary and standardized approach will continue to be followed to target priority high-risk health facilities in line with the evolution of the epidemic. Large health centres in the affected health zones will aim to maintain essential health services, as well as centres identified as potential hotbeds of nosocomial transmission.

This approach will be enhanced by the integration of mapping and real-time monitoring data to quickly identify at-risk FOSAs and to intervene using a ring-by-ring approach (i.e. working with affected FOSAs to target additional facilities and practitioners likely to see cases). This will aim to prevent other FOSAs in the geographical area from being affected.

Despite the progress noted, significant challenges to the timely, effective and reliable implementation of this coordinated approach to multifactor IPC remain. A recent Katwa analysis points out that 21% of cases have contact with a high risk health facilities before the onset of the disease. To date, there are 63 reported cases among health workers. Community resistance remains a major challenge and leads to security concerns, particularly for field staff. In addition, high-risk groups such as young children and pregnant women attending high risk health facilities have specific IPC challenges that need to be addressed.

To overcome these challenges and achieve the IPC objectives quickly and effectively, the management of the IPC pillars and partner coordination will have to be strengthened. In addition, gaps in SOPs and protocols need to be quickly identified and corrected.

Strategies and activities that need to be continued and/or strengthened include:

- Work with the Strategic Coordination Information Planning and Management Unit to use real-time to initiate IPC in FOSAs.
- Work with the surveillance mapping team to develop a reliable mapping of the public and private sector FOSAs, which will serve as a central database for the overall response.
- Continue to work with partners responsible for implementation and dissemination of the IPC package.
- Establish a secure distribution network (i.e. the supply chain) to reliably restore the supply of Personal Protective Equipment (PPE), as needed. A steady supply of PPE will help industry workers feel confident that they do not need to ration PPE and can instead use it as directed. Close coordination with the logistics pillar must be maintained to ensure an adequate supply of PPE.
- Continue to collaborate with private institutions and traditional healers through known networks and reduce the risk of transmission to service providers in maternity wards and operating theatres.
- Allocate Emergency Reproductive Health Kits to and involve midwives or birth attendants in Ebola training on IPC measures.

WASH activities in schools will also be developed as part of the IPC program and will aim to halt the spread of the disease through hygiene promotion and the provision of WASH kits in schools. The kits include a hand washing station and soap/temperature control points in targeted or at-risk schools in affected health areas.

The intersectoral strategy of the education sector involves key measures to prevent EVD in the school premises, including:

- Mapping of schools to identify proximity to a confirmed case and identification of schools in affected health areas.
- Training of education stakeholders (students, teachers, inspectors, school administration officials, provincial educational leaders) on Ebola, including school-based EHA, psychosocial support and anti-discrimination.
- The supply of infrared thermometers and handwashing facilities, drinking water, soap and capacity building on hygiene behaviour in schools.

- The construction of isolation rooms for suspected cases at school.
- Providing specific documentation and protocol for the prevention, guidance and management of suspected cases at school to provide key messages on family-based Ebola prevention.

6.9 Vaccination of at-risk groups

Despite the context and challenges, as of January 27, 2019, in North Kivu and Ituri Provinces 695 rings (3 February) were defined in the community and 2 targeted geographical areas. A total of 73,298 contacts and contacts of contacts were listed. Of those vaccinated, 18,895 are contacts, 22,441 are health and front-line staff and 16,855 are children aged 1 to 18 years.

As the number of cases reported from unknown contacts remains high, efforts have been made to improve the identification of contacts and contact of contacts, particularly in all locations where the symptomatic case visited a high-risk health facility before being isolated or dying.

It is important to emphasize that the investigational vaccine will continue to be used according to WHO recommendations in compliance with Good Clinical Practice (GCP) and that sustained attention be paid to the quality of the processes, procedures and management of clinical trials data in accordance with international standards.

However, there is a shortage of national staff trained in GCP, low involvement of HZMTs and the community in the organization of vaccination and an increase in the number of ineligible people (pregnant women, breastfeeding women and infants).

Other measures to establish and continue to prevent the spread of transmission include:

- Further improve the listing of the "satellites" of the rings (i.e. outside the place of residence of the case, these are all places that the symptomatic person visited before being isolated or dying) to identify and offer vaccination to all people at risk.
- Organize vaccination teams performing "sweeping" operations to review how rings were defined for cases with onset of symptoms in the last 7 days and to verify if contacts at the place of residence and in the satellites have been fully enumerated and vaccinated.
- Organize teams that primarily vaccinate all health personnel and front-line staff in priority-identified facilities because they have seen or treated a case of EVD within the previous 21 days.
- Modify the protocol for the use of the rVSV vaccine to include vaccination of pregnant women after the 1st trimester of pregnancy and vaccination of infants including new-borns, as recommended by the National Ethics Committee. Arrangements will be made for the follow-up of pregnant women who were vaccinated through the end of their pregnancies.

- Strengthen the technical capacity of national PCB teams to be able to deploy an experimental vaccine for this epidemic and in the future and consider appropriate study options for the evaluation of other vaccines against GCPs.

6.10 Safe and dignified burials (SDB)

Despite the security challenges, community resistance and cases of violence and aggression towards SDB teams, significant progress has been made in the coordination and implementation of SDBs in all affected areas. Unsafe burials are largely due to insecurity, community resistance or burials that are completed before the arrival of the SDB teams.

In this context, efforts will be strengthened to ensure secure funerals in areas that are difficult to access by forming several teams of civil defence volunteers, and other volunteers designated by community leaders and traditional Chiefs.

The evolution of the epidemic has revealed several unknown chains of transmission. For this reason, the SDB teams are asked to coordinate with the laboratory teams and ensure that all community deaths under their charge are tested.

6.11 Risk communication, social mobilization and community engagement

The integration of communication teams and psychosocial teams into the surveillance, vaccination and SDB teams (in addition to other pillars) had an almost immediate impact on the control of the epidemic and the reduction of violence in communities.

However, among the weaknesses in the implementation of communication activities, we note the poor monitoring of community feedback, the low utilization of Knowledge, attitudes and practices (KAP) surveys and other studies and surveys, the failure to follow the instructions and recommendations given by the Communications Commission and the absence of ongoing capacity building mechanisms. The more expertise within this domain, the faster and more effective the response will be.

Ebola communication strategies should lead to the creation of community-based and self-managed surveillance and alert systems. This should be negotiated and put in place as soon as possible, securing community acceptance and the support of community leaders and other "champions".

From this perspective, there is a clear benefit in developing an operational strategy to determine how to more effectively place local influencers as key informants in the response. The sooner communities accept ownership of the response themselves, the sooner the epidemic will end.

EVD communications should be understood as a dynamic intervention, with a strong focus on listening, empathy and adapting to community thoughts and reactions, in real

time. There is no universal solution. It will be necessary to ensure the identification of good staff profiles to be involved in this activity and their training.

The following priority activities will be chosen in accordance with the epidemiological situation within the health zones:

- Review the current communication strategy to adapt it to the communication problems posed by specific groups, integrate existing evidence and adapt the mapping of partners to determine their specific roles and responsibilities.
- Strengthen the collection, analysis and use of data, review the system of reporting and harmonization between the different sites and expedite rapid assessments of social structuring especially in the newly affected areas.
- Intensify the mobilization of community leaders (district/village chiefs, street chiefs, local committees, *Comité à Assise Communautaire CAC* (community committee), RECO, heads of prayer houses and traditional healers) in the control of the EVD epidemic.
- Systematize the obtaining and analysis of community feedback and mechanisms for its consideration or coordination.
- Intensify sensitization activities aimed at improving people's perception of the response by considering the specificity of the target groups and by using people who have been cured, discharged and through guided tours of ETCs.
- Continue production and intensify the broadcasting of radio and TV programs, spots and micro-programmes on Ebola prevention in local media.
- Train supervisors and reinforce supervision missions of RECOs, community leaders and other communication actors involved in the response. Set up a dedicated training team responsible for the ongoing training of supervisors, mobilizers and frontline workers, and constantly adapt training according to the changes in strategy.
- Establish a community-based early warning system for suspected cases and community deaths in collaboration with the surveillance team (toll-free number to the community); organize home visits to high-risk households in problem areas and inform them about immunization.
- Involve celebrities, support the integration of SACs, NGOs, Religious Groups, and Women and Youth Associations as key actors in the implementation of communication activities.
- Strengthen communication activities through community dialogue, focus groups, community debates and tribunes of popular expressions in communities by involving local leaders.
- In points of entry, support the integration of commanders of police units as outreach agents and the installation of loudspeakers with pre-recorded messages.

6.12 Psychosocial care

Psychosocial assistance is an essential element of the management of EVD cases. Survivors and their family members are often stigmatized and prevented from resuming their activities after their recovery.

Moreover, it is important to ensure the psychological briefing of participants on the attitudes to be displayed on the ground and stress management, as well as a psychological debriefing (a brief preventive therapy after 2 months of participation in the response). It is therefore important to integrate psychosocial care into the response as quickly as possible in all affected areas.

Key activities:

- Strengthen psychological support in the ETCs (confirmed, suspects, and discharged) and assistance with hygiene kits for all discharged and cured patients.
- Support ill wardens at the ETCs and affected households to anticipate the management of behavioural problems, likely to generate tensions and resistance in the community.
- Continue psychosocial support and/or material assistance (food kits, non-food items kits, recreation kits) to affected families.
- Continue psychosocial and nutritional support to contacts, along with psychoeducational sessions to facilitate the work of the surveillance and vaccination teams.
- Continue psychosocial support, nutrition, material and school reintegration of orphaned and separated children due to EVD.
- Intensify psychoeducational activities with a focus on the axes or neighbourhoods targeted by the mapping of areas of resistance to reduce anxiety and increase acceptance of the disease and control measures.
- Recruit additional local psychologists, brief them with nationals and strengthen the PSA workforce (providers), train them on psychological care techniques for victims of EVD and disburse support teams to other areas.
- Conduct briefing and debriefings with providers.

6.13 Access to health services

Facilitating access to health services is essential for an effective response, as it promotes the utilization of services including people potentially infected with Ebola.

A summary review shows that the use of health services has increased since the introduction of free health care in about 50 approved health facilities. The package of free services includes the provision of medicines and operating costs in relation to a limited number of diseases and conditions, mainly those for children and women. To avoid unintended effects, free care is not established for private health facilities and traditional healers, for which other incentives will be put in place to improve their cooperation in the response.

It should also be noted that during the outbreak of EVD, some common medical interventions, such as vaccinations, injections and surgical procedures are often avoided or minimized.

Quite rapidly, unexpected side effects from this health care subsidy were observed. Attendance in health centres was lower, while hospital use increased, with long queues, poor quality, and very high and unsustainable costs. In a very short time (1-4 months), the average cost of the "free" approach to health care increased to \$17 per capita per year (on a scale of 3-42, the median of 14, and a standard deviation of 12.8). The initial objective of the system, to stimulate the lowest use of the health pyramid, i.e. the health centres, was negatively impacted.

To achieve the objective of this subsidy and to be rational, it was decided that the subsidy focus of benefits that could contribute to the detection of EVD cases. Hence, only the following services are subsidized:

Nr	Minimum Service Package	Services
1	External consultation	External reference consultation
2		Admission to internal medicine (acute case)
3		Admission to paediatrics (acute case)

Key activities:

- Ensure that guidelines on the package of services included in the subsidy are clear and well understood in the field for outpatient (health centre); outpatient referral (hospital); admission to Internal Medicine (hospital); and paediatric (hospital) admission.
- Identify other FOSAs according to the dynamics of the epidemic, particularly in Ituri (Bunia, Tchomia).
- Contribute to the quality of care through integrated supervision and vaccination of health personnel in high risk areas.
- Evaluate the impact of the care subsidy on the dynamics of the epidemic.
- Ensure the availability of essential medicines.

Tracking indicator:

- Proportion of alerts from health facilities under the free health care initiative
- Number of new registered consultations

6.14 Preparation of health zones and provinces adjacent to epidemic foci

Given the geographical spread of the epidemic, the existence of unrecognized chains of transmission in the community, the loss of contacts and the high mobility of populations in this region of the DRC, the risk of the epidemic spreading remains high in the unaffected health zones of the provinces of North Kivu and Ituri and in neighbouring provinces (Haut and Bas-Uele, Tshopo, Maniema, South Kivu, Haut-Lomami, Kasai Oriental and Tanganyika). It is therefore necessary to accelerate preparedness activities in these health zones and provinces.

Key activities at the provincial level are:

- Strengthen coordination structures including the technical sub-commissions set up by the Governors and Provincial Ministers of Health; and organize at least two simulation exercises on the management of suspect cases per month.
- Strengthen surveillance measures, especially investigation and tracking of alerts. Expand and decentralize the establishment, training and equipment of rapid response teams in at least five of the identified high-risk health sectors in each province. Support the systematic investigation of alerts, as well as the safe transport and tracking of samples sent for diagnostic confirmation.
- Strengthen IPC capacities in health zone structures (include at least one referral hospital and five health centres in five health zones in each province). Train health personnel in universal precautionary measures and specific measures to prevent and combat EVD (200 health workers/province/month).
- Intensify and decentralize community outreach and mobilization activities (10 community sessions and training of 100 community leaders per month).
- Strengthen the capacity for rapid management of suspected cases, including contact tracing, secure care, dignified and safe burial at high-risk health zones.
- Strengthen screening, outreach, isolation and referral activities at entry points with intensive passage that are unsupported (average of 30 PoE/province).
- Ensure the availability of technical, logistical, security and administrative support and tools for the smooth running of the afore-mentioned activities.

6.15 Strengthening workforce coordination and training through the establishment of the Ebola Centre of Excellence (ECE)

Frequent epidemics occur in the Democratic Republic of the Congo, which calls for the consolidation of existing but disconnected public health programmes under one umbrella. To minimize fragmentation and promote effective systems, a National Institute of Public Health (NIPH) is required in the Democratic Republic of the Congo: the CDC-Democratic Republic of the Congo.

The Ministry of Health aims to establish a Centre of Excellence against the Ebola virus (CEE), which will serve as an embryo for the future CDC-DRC. The CEE, as an NIPH embryo, would be housed within the Ministry of Health, and anchored at the *Direction Générale de la Lutte Contre les Maladies (DGLM)*, to facilitate coordination with critical disease-related structures and programs such as laboratory and hygiene. It will maintain a level of administrative and financial autonomy that will enable CEE to make decisions for the rapid deployment of resources (human and financial), to collaborate effectively with partners (internal and external) and to ensure proximity to and collaboration with the provincial level.

The CEE will build on existing response efforts and gradually integrate additional functions. It will serve to strengthen and institutionalize the ongoing response in North Kivu. In particular, the first phase of the CEE will build on current response structures and best practices, including the new strategic coordination in Goma and a strategic direction to be established at the national level in Kinshasa. Partners and stakeholders will continue to work together to identify relevant activities to support and strengthen, including improving links to information flows and briefing deployment teams. Reacting to the Ebola outbreak in North Kivu offers nationals of the Democratic Republic of the Congo an opportunity to gain experience through on-the-job monitoring and intervention. Harnessing the knowledge and experience of the country's public health staff during the tenth Ebola outbreak is an investment in human resources with a lasting gain in the knowledge. Improving and effectively applying the basic knowledge of the workforce to the transmission and control of the Ebola virus is a crucial intervention that the Democratic Republic of the Congo proposes to do to stop the epidemic.

6.16 Human resources, operational support and logistics

Key infrastructure, critical procedures and operational support mechanisms need to be strengthened to effectively support the response on all fronts.

Key activities:

- A single deployment plan for Ministry of Public Health (*Ministère de la Santé Publique (MSP)*) staff and all organizations involved in the response will be developed and maintained at the strategic coordination level. This plan will track related actions such as stakeholder upgrades, staff turnover and premium payments.
- Establish a unified response for logistics with a regular compilation of the contribution from all partners.
- Continue the transportation of personnel, the management and maintenance of the fleet and motorcycles; set up mobile camps where necessary, as the epidemic evolves.
- Consider potential expansion areas and prepare for intensification and preparedness measures, including the solution of pre-positioned camps and mobile storage units.
- Ensure efficient delivery and distribution services, including customs clearance, transportation, handling, repackaging and storage tailored to the needs of stakeholders.
- Provide security (fencing, protection towers, walls as per security advisories) for camps and storage facilities.
- Continue the procurement of office supplies including communications and computer equipment, personal protective equipment, rolling stock, generators, tents or materials for the construction/rehabilitation of temporary shelters, beds and other equipment necessary for setting up camps.
- Maintain regional preparedness to strengthen operational capacity in the Democratic Republic of the Congo as the epidemic evolves, for example by identifying regional assembly areas.

6.17 Security risk and political risk management

In addition to the challenges posed by community resistance (including reported attacks on response personnel), the fluidity of the security situation and the risk of rapid deterioration pose additional security challenges.

The unpredictable security context may lead to restrictions on movement, curfew and other security measures that have a negative impact on the response. Emergency planning and the implementation of specific mitigation measures are essential to ensure full operational continuity throughout the duration of the Ebola response.

These activities will focus on:

- Immediate measures to ensure stable and predictable intervention in support of existing operations while continuing to evolve operations in Butembo and Katwa. This will include the establishment of strategic stock and prepositioning of key supplies and equipment, increased dialogue with local communities and other stakeholders to reduce the level of risk and the implementation of teleworking and remote operations with the expanded use of national staff.
- Strategies to ensure operational continuity in areas of increased security risk, including the establishment of trauma stabilization stations in all operational areas related to appropriate casualty evacuation procedures and, if necessary, relocations of facility personnel and the implementation of remote intervention operations.
- Strategies to limit the risk of spreading EVD to border regions caused by movement of people in relation to political or security incidents, including the establishment of coordination and response structures in adjacent health areas.

The large number of personnel deployed over a large geographical area further increases the risk of road accidents. These health and safety risks associated with the unavailability of high-level care facilities and emergency response services pose a growing challenge to the health of WHO staff and partners. The latter, in coordination with MONUSCO, are putting in place a highly qualified trauma response capability to undertake high-level pre-hospital stabilization, including mass casualty intervention. The primary role of trauma response capacity will be to provide multiple highly mobile rapid response teams capable of providing advanced resuscitation intervention for WHO national and international staff and partners in the event of a traumatic emergency, life-threatening and/or mass incident with loss of life.

Emergency medical support will include:

- Provision of 24-hour trauma emergency support to strategic locations where concentrations of WHO staff and partners work and live.
- Providing mobile emergency trauma support to teams working in remote, high-risk areas.
- Continuous emergency first aid training for WHO staff and partners.

- Revision and repetition of multiple incident response plans for all areas of WHO Ebola Response Operations with an acceptable level of risk in the Democratic Republic of the Congo and operating in compliance with all security requirements of the UNDSS.
- Coordination with all stakeholders to ensure harmonized response capacity.

The teams will be stationed in the main hotel residences and operating areas, including the Emergency Operations Centre. Five units should operate with three stationed at Beni, one at Butembo and one mobile unit to complete other teams but also deploy in remote areas when needed.

Areas of operation and reassignment of teams will be continuously reviewed according to the epidemiological context of response and Ebola security.

To ensure alignment among response partners, including the development of common scenarios and assumptions, contingency planning is implemented through the Ebola Strategic Response Committee in Beni.

6.18 Food distribution

Considered a significant incentive, food distribution must now be:

- Organized by the contact tracing team (joint team vaccinators-follow-up contacts-food distribution)
- Implemented by a single organization with its executing agency
- Establish performance monitoring indicators

World Food Programme food aid plays a vital role in meeting the needs of people in the regions affected by the epidemic through three key pillars:

- Care: direct nutritional and medical support efforts for the treatment, recovery and reintegration of patients with EVD and their households.
- Contain: Assistance provided to contacts of confirmed Ebola cases to facilitate the efforts of health partners, to reduce transmission rates through contact tracing, communication, infection prevention, psychosocial support, and complementary toilet kits.
- Protect: Address food security and livelihood needs and promote community engagement of Ebola affected populations before, during and after the epidemic.

95% of food aid is allocated to the "Containment" pillar, with the World Food Programme distributing food parcels each week during the 21-day medical observation period of Ebola contacts.

7. Monitoring and Evaluation

The Ministry of Health and WHO, in collaboration with OCHA, WFP, IOM, UNICEF and CDC and in line with the information management strategy presented above, publish daily epidemiological updates. These publications are completed on a weekly basis with detailed status reports and periodic reports on indicators established according to the response monitoring reference framework. The response monitoring framework is based on a rationale for identifying inputs, outputs, outcomes and impacts. The results and impacts derive from the list of key performance indicators (Annex). The results are monitored from a list of core activities divided into "pillars" of intervention such as monitoring, IPC-WASH, based on a series of pre-established criteria to define their implementation status classified as "operational", "partially operational" and "non-operational". Input monitoring is composed of key figures on assets and resources (e.g. stocks, supplies, transport, communication, vaccines, human resources, etc.) and mapping of operational partners in a 3W (Who does What, Where).

Each sub-coordination and strategic coordination management team will produce some essential products derived from the process of data collection, processing and analysis.

Table of product frequency

Product	Frequency	Responsible agency/ies
KPI	Weekly	MSP, WHO, OCHA, UNICEF, CDC
Dashboard	Weekly	MSP, WHO, OCHA
3W	Weekly/Monthly	MSP, WHO, OCHA
Partners list	Weekly	MSP, WHO, OCHA
Output analysis	Weekly	MSP, WHO, UNICEF, CDC
Input analysis		MSP, WHO, UNICEF

8. Budget

The Strategic Response Plan's interventions cover a 6-month period and amount to US\$148 million. It is expected that the overall budget need will be re-assessed on a regular basis considering operational reviews and progress of the outbreak. Budget execution will be closely monitored by a dedicated team at the National level.

Response strategies (revised interventions)	US\$ February-July	Main support partners
<p>Strengthening the coordination of the multisectoral response with different committees at different levels</p> <ul style="list-style-type: none"> • 3 x Provincial Emergency Operations Centres • 6 x field coordination • 1 x National Coordinating Committee • Information management/Monitoring and evaluation 	21 150 000	WHO, Projet de Développement du Système de Santé (PDSS), OCHA
<p>Surveillance, active case finding and contact tracing</p> <ul style="list-style-type: none"> • 17 rapid response / case investigation teams • 8 teams to follow up on missing contacts • 75 x monitoring supervisors • 1 500 x contact tracing agents • 112 x points of entry under surveillance 	25 100 000	WHO, GOARN, MSF, IOM
<p>Strengthening mobile laboratories' diagnostic capabilities</p> <ul style="list-style-type: none"> • 1 x national reference laboratory • 11 x mobile laboratories • Logistics for transporting samples 	1 255 000	WHO, EDPLN, PDSS
<p>Case management of patients and suspected cases</p> <ul style="list-style-type: none"> • 9 x EVD treatment centres and transit centres • 600 x triage units in hospitals / health centres 	19 432 000	WHO, MSF, EDCARN, ALIMA, Emergency Medical Teams
<p>Strengthening prevention and control measures, as well as water, sanitation and hygiene services in health facilities and communities</p> <ul style="list-style-type: none"> • 600 x health facilities • 600 x in schools • 900 x in the communities in affected areas • 23 x teams for safe and dignified burials • 17 x decontamination teams 	12 690 000	WHO UNICEF, IFRC, Congolese Red Cross, UNFPA

Response strategies (revised interventions)	US\$ February-July	Main support partners
Strengthening communication and social mobilization <ul style="list-style-type: none"> • 18 x risk communication • 800 x teams for community engagement • 8 x anthropology teams 	7 610 000	WHO UNICEF, IFRC, Congolese Red Cross,
Psychosocial support <ul style="list-style-type: none"> • 10 x psychosocial support teams • 1 x nutrition and food support for affected people 	10 993 000	UNICEF, WFP
Vaccination of at-risk groups and response of research <ul style="list-style-type: none"> • 20 x vaccination teams 	10 780 000	WHO, MSF, GOARN, UNICEF
Support for free health services	12 700 000	PDSS
Operational and logistical support <ul style="list-style-type: none"> • 2 x operational bases • 6 x field operational bases • 1 x national logistics base 	21 615 000	WHO, WRP, MONUSCO, UNICEF
Preparation in Provinces / Health Zones Adjacent to North Kivu and Ituri <ul style="list-style-type: none"> • 50 x Health Zones in North Kivu and Ituri 	4 550 000	WHO
BUDGET TOTAL US\$	147 875 000	

Annex: Table of key performance indicators

	Indicator title	Target
General	Number of new confirmed cases	0
General	Number of new probable cases	0
General	Number of new suspected cases	Undefined
General	Number of new affected health zones	0%
General	Time from symptom onset to effective isolation (or notification) in days	4 days
Surveillance	Case investigation of all verified alerts completed within 24 hours of alert	100%
Points of Entry	Percentage of point of entry and control (PoE/PoC) with uninterrupted operations in the last 7 days	85%
Points of Entry	Percentage of the travelers screened at PoE/PoC	90%
Contact tracing	Percentage of contacts (of confirmed + probable cases) for whom contact tracing has been completed (21 days)	100%
Contact tracing	Percentage of contacts on a line list successfully followed up during previous 24 hours	100%
Contact tracing	Percentage of contacts on a line list successfully followed up during previous 24 hours	100%
Contact tracing	Percentage of contacts lost to follow up	0%
Laboratory	Proportion of community deaths tested positive	100%
Laboratory	Percentage of laboratory results for all suspected cases available within 48 hours	100%
Case management	Case fatality ratio for all confirmed cases admitted into Ebola Treatment Centres	< 50%
Case management	Percentage of under 23 months children caregivers who received appropriate counseling on infant and young child feeding in emergency	100%
IPC	Number of cases who are health care workers	0
IPC	Proportion of deceased suspected cases for which safe burials were conducted	100%
IPC	Percentage of health centers with an IPC score above 80%	100%
IPC	Percentage of health care facilities in affected zones with a minimum IPC package	100%
IPC	Percentage of schools and public places near confirmed cases locations where handwashing stations are utilized	100%
IPC	Percentage of households of confirmed cases, contacts and neighbours of confirmed cases who received a hygiene and prevention kits with adequate messaging	100%

Indicator title		Target
Vaccination	Percentage of eligible persons vaccinated	100%
Vaccination	Average number of days between identification of a confirmed or probable new case and the opening of a vaccination ring	100%
Free health care	Proportion of alerts coming from structures benefiting from free access to care	50%
Community engagement	Percentage of respondents who know at least 3 ways to prevent Ebola infection in affected communities	80%
Community engagement	Number of school children who received information on Ebola prevention	100%
Psychosocial care	Percentage of respondents who know at least 3 ways to prevent Ebola infection in affected communities	100%

CONTACTS

For further information, contact:

Democratic Republic of the Congo
Ministry of Health

Dr Ndjoloko Tambwe Bathé
General Directorate for Disease Control,
General director
Email: mbathe42@hotmail.com
Tel : +243 99 9990 80 64

Dr Dominique Baabo
Coordinator
Health System Development Programme
Resource mobilization
Email: mdobaabo2@pdss.cd
Tel: +243 81 617 99 21

Ms Jessica Ilunga
Press officer
Email: presse@sante.gouv.cd
Tel: +243 82 030 78 72

Partners:

WHO – Democratic Republic of the Congo

Dr Deo Nshimirimana
WHO country representative
Email: nshimirimanad@who.int
Tel: +47 241 39001

Dr Michel N'da Konan Yao
Incident manager
Email: yaom@who.int

Ms Clarisse Kingweze
Resource mobilization officer
Email: mckingweze@who.int

UNICEF - Democratic Republic of the Congo

Dr Gianfranco Rotigliano
UNICEF representative
Email: grotigliano@unicef.org

Dr Tajudeen Oyewale
UNICEF deputy representative
Email: toyewale@unicef.org

Dr Hamady Ba
Emergency coordinator
Email: hba@unicef.org

WFP - Democratic Republic of the Congo

Mr Claude Jibidar
Country representative
Email: claudio.jibidar@wfp.org

Humanitarian coordination

Mr Julien Harneis
Deputy Humanitarian Coordinator
Email: harneis@un.org
Tel: +243 999981875

ALIMA - Democratic Republic of the Congo

Mr Tinou-paï Blanc
Head of Mission
Email: cdm@rdc.alima.ngo
Tel: +243 8 17 59 75 95

MSF - Democratic Republic of the Congo

Mr Karel Janssend
Head of Mission - MSF – OCB RDC
Q. Bassoko – Ngaliema
Tel: +243 (0)815 026 027 / (0)84 136 22 84

OIM - Democratic Republic of the Congo

Mr Jean-Philippe Chauzy
Head of Mission
Email: jpchauzy@iom.int