SOUTH SUDAN EBOLA VIRUS DISEASE (EVD) PREPAREDNESS FULL SCALE SIMULATION EXERCISE

14th August 2019
Acknowledgement

This full-scale simulation exercise was successively planned and executed as a result of commitment and enduring support from various experts from the Ministry of Health and partners. We appreciate the strong commitment and support of the Senior leadership of the Ministry of Health led by the Hon Minister of Health Dr Riak Gai Kok and the Undersecretary Dr Makur M. Kariom who was the exercise Director. The team acknowledges the Minister of Health Yei River State Hon. Kogo Manasseh, and the Commissioner for Nimule Hon. Emilio Igga Alimas for facilitating the exercise in their respective areas of jurisdiction.

The Ministry of Health collaborated with WHO and EVD preparedness partners to execute the simulation exercise. The Exercise was funded by the WHO and UNICEF with the participation of technical partners such as AAH, Africa CDC, CDC, Consortium (ALIMA, GOAL, CONCERN), CORDAID, IFRC, IMC, MSF, SSRC, UNICEF, UNOCHA, USAID, WFP, and World Vision.

We appreciate the special efforts of the Exercise Controller Dr Otim Patrick Ramadan and the entire Exercise Management Team at the different levels in Brazzaville, Geneva, Juba, Nimule and Yei.

In addition, the Ministry of Health is grateful to the simulation exercise support team from WHO HQ and AFRO office (Dr. Mary Stephen, Dr. Allan Mpairwe, Dr Antonio Oke, Ms Ishata Conteh, Austine Jones, Yingxin Pei and Dr Ifeanyi Okudo) and from CDC (Dr Richard Garffield and Daniel Wako) as well as Dr Everitus Aniaku (NCDC) and Ms Pauline Nafula (Ministry of East Africa Community, Kenya) for their technical input during the planning and conduct of the exercise.

Further, we acknowledge Major Cassio Laliwa (SSPDF Medical Corps) and Mr. Rhoderick Maniego (WHO Field Security Officer) for coordinating with all security agencies and ensuring free access to the international airport and other locations. Finally, we appreciate the WFP/UNHAS team for facilitating flights to Nimule and Yei.
Executive Summary

Following the declaration of the 10th EVD outbreak in the Democratic Republic of Congo (DRC) in North Kivu and Ituri provinces in August 2018, South Sudan embarked on EVD preparedness guided by the WHO Consolidated EVD preparedness Checklist. The National EVD task force was activated chaired by the highest level of the Ministry of Health. State taskforces were established in the states (Gbudue, Jubek, Maridi, Tambura, Torit, Wau and Yei) that were deemed to be at high risk of EVD importation based on proximity to DRC, population movement overland or by air.

Over the last 12 months, significant progress has been made in the implementation of EVD contingencies. In March 2019, a Joint Monitoring Mission assessed the overall level of EVD preparedness at 61 per cent, up from 17 per cent in November 2018. To further test operational readiness, a one-day full scale simulation exercise was held on the 14th of August 2019. The exercise was conducted in a highly stressful environment, simulating response to multiple suspected and / or confirmed cases of EVD in Juba, Nimule and Yei. It tested operations of the national alert and case investigation system at national, state and community levels. Through mobilization and deployment of emergency personnel, equipment and other resources, the exercise enabled the simulation and evaluation of numerous emergency procedures and the coordination of actions of multiple entities, including activation of the Public Health Emergency Operations Centre (PHEOC), from the reception of alerts through the deployment of investigation teams until the discharge of cases from isolation / treatment centres. Other aspects of the response such as shipment of specimens for laboratory testing, laboratory testing, contact tracing, movement and management of a dead body, and vaccination strategies, were not simulated and only tested in a tabletop approach. The ability to detect and report a suspect case in the community or an unexplained community death were not tested.

Evaluation was conducted by experienced evaluators, experts in their respective fields, and addressed two aspects: (1) assessment of participants’ performance in exercising the operation(s) and/or function(s) tested, and (2) appraisal of the organisation and undertaking of the FSX.

Overall, the simulation showed improved coordination and better performance between teams, and improved capacities for EVD readiness. Generally, participants had good knowledge of their specific functions within an EVD response - however most actions and processes were not systematized, there was little reference to Standard Operating Procedures (SOPs), plans and other guidance. Further, there were inadequate linkages and information sharing between the national and sub national levels. Rapid Response Teams and case management should be subjected to regular drills.
The recommendations made to address the gaps identified are summarized as:

1. National Task Force (NTF) to review its composition such that; while responding to events, only decision makers attend the meetings for effective and strategic guidance of the response.
2. NTF to review and finalize the 72-hour response plan with clear roles and responsibilities in alignment with the IMS framework.
3. NTF to improve coordination and communication with State Task Forces (STFs) and between Technical Working Groups (TWGs).
4. TWGs to review SOPs as per recommendations, print and disseminate the revised SOPs, develop job aids, train personals on SOPs and ensure adherence to the SOPs.
5. All TWGs to conduct regular drills to improve performance of their teams.
6. The EVD preparedness effort should build on existing systems and strategies to ensure EVD specific systems also serve to strengthen IHR capacities and enhance resilience of the health system.

The simulation showed that South Sudan has attained some level of EVD preparedness and identified areas to be addressed urgently for effective and efficient response to any EVD outbreak. Concerted efforts from all stakeholders is required to address gaps.
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Based on the list of recommendations above the Strategic advisory group prioritized the following for immediate implementation.

next steps:

Annexes
**Acronyms**

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<tr>
<th>Acronym</th>
<th>Full Name</th>
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<tbody>
<tr>
<td>AAHI</td>
<td>African Action Health International</td>
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<td>Africa CDC</td>
<td>Africa Centre for Disease Control</td>
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<td>AFRO</td>
<td>Africa Regional Office</td>
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<td>CDC</td>
<td>Centres for Disease Control</td>
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<td>CIF</td>
<td>Case Investigation Forms</td>
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<td>CSO</td>
<td>County Surveillance Officer</td>
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<td>DG</td>
<td>Director General</td>
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<td>DRC</td>
<td>Democratic Republic of Congo</td>
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<td>EOC</td>
<td>Emergency Operations Center</td>
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<td>EVD</td>
<td>Ebola Virus Disease</td>
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<td>FLHW</td>
<td>Frontline Health Workers</td>
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<td>FSX</td>
<td>Full-scale Simulation Exercise</td>
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<td>HQ</td>
<td>Headquarters</td>
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<td>IDU</td>
<td>Infectious Disease Unit</td>
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<td>IEC</td>
<td>Information Education and Communication</td>
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<td>IFRC</td>
<td>International Federation of Red Cross</td>
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<td>IPC</td>
<td>Infection Prevention and Control</td>
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<td>IM:</td>
<td>Incident Manger</td>
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<td>IMT:</td>
<td>Incident Management Team</td>
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<td>IMS</td>
<td>Incident Management System</td>
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<td>IU</td>
<td>Infection Unit</td>
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<td>JIA</td>
<td>Juba International Airport</td>
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<td>MOH</td>
<td>Ministry of Health</td>
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<td>MSF</td>
<td>Médecins Sans Frontières</td>
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<td>NCDC</td>
<td>Nigeria Centre for Disease Control</td>
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<td>NTF</td>
<td>National Taskforce</td>
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<td>NRRT:</td>
<td>National Rapid Response Team</td>
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<tr>
<td>Abbreviation</td>
<td>Description</td>
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<td>sRRT</td>
<td>State Rapid Response Team</td>
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<td>OCHA</td>
<td>United Nations Office for the Coordination of Humanitarian Affairs</td>
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<td>PCR</td>
<td>Polymerase chain reaction</td>
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<td>PSS</td>
<td>Psychosocial Support</td>
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<td>PPE</td>
<td>Personal Protective Equipment</td>
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<td>PHCC</td>
<td>Primary Health Care Centre</td>
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<td>PHEOC</td>
<td>Public Health Emergency Operations Centre</td>
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<td>RCSMCE</td>
<td>Risk Communication, Social Mobilization and Community Engagement</td>
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<td>RRT</td>
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<td>Safe and Dignified Burial</td>
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<td>SSRC</td>
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<td>State Ministry of Health and Environment</td>
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<td>SOPs</td>
<td>Standard Operating Procedure</td>
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<td>South Sudan Peoples Defences Forces</td>
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<td>State Surveillance Officer</td>
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<td>United States Agency for International Development</td>
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<td>WFP</td>
<td>World Food Programme</td>
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<td>World Health Organization</td>
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Introduction

The Republic of South Sudan has been on heightened alert since the 10th EVD outbreak was declared in the Democratic Republic of Congo (DRC) in August 2018. The Ministry of Health, WHO, UN agencies and partners have been undertaking concerted efforts for operational readiness to respond to any potential EVD outbreak. The outbreak in the DRC is far from being contained - since June 2019 transmission has spread to new geographical areas including Ariwara and Goma, and Kasese in Uganda. In August 2018 the MOH launched multi-sectoral preparedness in line with the consolidated EVD preparedness checklist. Based on geographic proximity to the affected provinces in the DRC, the volume of travel and trade, and the previous history of EVD in the country, seven states were assessed to be at highest risk of transmission, namely Gbudwe, Jubek, Maridi, Tambura, Torit, Wau, and Yei River.

To guide preparedness efforts the NTF developed an EVD preparedness plan, under which Operational Plans were drafted. The first phase was from October 2018 to March 2019 was followed by a second phase Operational Plan from April to September 2019. Significant progress has been made in the implementation of the Operational Plan and thus it was necessary to test the systems that have been established over the previous 12 months.

Purpose

The purpose of the field/full-scale exercise was to test the preparedness and operational readiness to respond to a potential EVD outbreak in South Sudan.

Scope

The exercise was a field/full-scale exercise, simulating a real event of multiple suspected cases of EVD in Juba, Nimule and Yei. The exercise tested EVD operations at the national, state and community levels. Through the mobilization and field deployment/movement of emergency personnel, equipment and other EVD response resources, participants and other stakeholders tested numerous aspects of EVD response and coordination of the actions of multiple entities including the activation of the PHEOC, from the reception of alert through the deployment of the different teams, namely: rapid response team, ambulance teams and safe and dignified burial teams, to the declaration of the end of the outbreak. The roles of the NTF and STFs were assessed, along with the overarching roles of health institutions such as the National Ministry of Health, the State Ministry of Health and
Environment, the Ministry of Defence and Veteran Affairs (SSPDF Medical Corps), and coordination with UN agencies, international and national non-governmental organizations.

**Specific objectives:**

i. To test preparedness and response capacities and functionality of the EVD TWGs at national and sub national levels;

ii. To test coordination linkages and synergies between the different TWGs; and

iii. To validate existing response mechanisms and identify areas within preparedness plans and SOPs that may require revision and strengthening.

**Methodology**

The full-scale exercise involved three scenarios in Juba, Nimule and Yei as described below:

**Scenario One: Point of Entry in Nimule**

A sick traveller crossed by land through a POE from Arua, Uganda. The traveller has a fever, is weak and has a travel history from DRC. He is put in secondary screening and the Nimule RRT is called to investigate. The ambulance team transfers him to the IU. He travelled in a taxi with six people while in DRC and another 10 people to Nimule. Patient tests negative twice for EVD after 12 days.

**Scenario Two: Health Care Facility in Yei**

A patient presents at a health care facility in Yei with Ebola-like symptoms; they also have a history of frequent travel to DRC for business. The patient has contact with many health care workers who treat him without personal protective equipment (PPE). The patient is investigated by the RRT and transferred to the IU by ambulance. The patient dies in the IU before the receipt of the lab sample that is positive for EVD.

**Scenario Three: Juba International Airport and Health Care Facility in Juba**

A passenger arrives at Juba International Airport with a fever. They are put in secondary screening, where it is learned they have travel history from DRC. The National RRT (NRRT) is called to investigate and an ambulance is called to transfer them to the IU. On the same day there is a report of a patient at a Juba health care facility meeting the EVD case definition. They have travelled in a taxi with sick person with travel history to DRC. The NRRT is called and an ambulance is dispatched to transfer them to the isolation unit. Both patients survive.
Exercise Conduct
Briefing with the different actors and a mini dry run were conducted a day before the exercise to ensure understanding of roles and what was expected during the simulated scenarios. Gaps identified in the planning and execution of the exercise were addressed immediately.

The Exercise
The entire exercise was performed between 09:00hrs and 17:30 hours. There were three exercise control rooms (in Juba, Nimule, and Yeı) with teams under one overall exercise controller in Juba. Facilitators administered the injects to the participants according to the pre-determined inject matrix. Some unanticipated injects were developed spontaneously to allow the exercise to proceed. Events were tracked on event logs, and milestones posted in real-time on the Exercise WhatsApp group.

Post Exercise
The exercise ended with an immediate debrief (hot wash) to the participants and observers in Juba, Nimule and Yeı, conducted by the lead evaluator at each location. During the debrief the evaluators provided their initial feedback to participants, and participants also provided their feedback on the exercise. The main exercise debriefing was conducted the second day after the exercise at the PHEOC in Juba with high level participation (Minister of Health, WHO Representative, CDC Country Director and donors). The exercise objectives and process were reviewed with all the participants. Best practices, challenges and areas for improvement arising from the exercise in each of the locations were presented.

Evaluation Strategy
The functions tested by the scenarios included coordination, surveillance and laboratory, border health and points of entry; ambulance services, case management and infection prevention and control, safe and dignified burial, EVD ring vaccination, logistics, access and security, and risk communication. The evaluation was conducted by well-trained evaluators who were experts in the function(s) they evaluated. In addition to the evaluation checklist, evaluators took notes on what they observed in terms of strengths, weaknesses and opportunities for improvements. To ensure that the evaluation was effective the evaluation strategy was matched with the expected outputs and exercise objectives. The evaluation addressed two aspects: (1) evaluation of participants’ performance in exercising the operation(s) and/or function(s) tested; and (2) an appraisal of the FSX organisation.
Key findings

Overall

The simulated scenarios tested a suite of capacities of the EVD preparedness structure. The scenarios were diverse with regards to geography, suspected case identification location, and case history. The NTF, MoH staff, and implementing partners participated enthusiastically in the exercise and brought a variety of technical expertise to responding to the alerts.

The simulation highlighted several key successes of preparedness to date. The isolation unit was ready to safely accept patients within minutes of notification of an alert and a suspect EVD patient. The NTF, MoH, and emergency response staff used the National Public Health EOC for coordination activities during the simulation exercise. This is the first successful use of the space for a national, full scale exercise of this nature in South Sudan. Screening staff at both JIA and the Nimule POE demonstrated knowledge of appropriate screening procedures and skills in case detection. Social mobilizers rapidly responded to the need for community level communication and engagement.

Review and update SOPs for all TWGs

Even during the planning of the SIMEX it was clear that there were areas in the SOPs of all technical areas that needed further discussion and updating. For example, in the current Epi/Surveillance SOP the way an alert should be communicated and responded to according to the SOP, is not the current practice. The following issues were identified in the SIMEX that need clarification in the SOPs:

- When the ambulance should be dispatched (at the same time as the RRTs or after the alert has been investigated)
- When the RRT members should put on PPE (before or after assessment of a patient)
- Who is in charge of taking care of the patient while they are waiting for the RRT at secondary screening areas
- When to dispatch the national vs. state RRT in Jubek State
- Who takes a blood sample (RRT or isolation unit staff)
- Monitoring of patient at screening points, health care facilities and IUs
- Proper sample collection, handling, packaging and disinfection
- Proper level of patient contact (who should have contact with the patient)
Psychosocial management of the patient

How to handle a patient’s luggage/belongings at POEs, health care facilities and IUs

Review/Update SOPs for activation and deactivation of EOC

The EOC needs clear activation and deactivation SOPs such that it is clear to all concerned when it is activated and when it is deactivated this would also clarify the required resource for each. This should also include establishing operational period SOPs (meeting frequency, report update periodicity for team leads). Activation should align with recommendations in the 72-hour plan.

Develop, disseminate and test protocols for communication with the public during emergencies

Formal communication—media interviews and press releases—about the alerts and subsequent EVD case confirmation was conducted in an ad hoc manner, without a clear strategy, leading to rumors and confusion in the public and on media. The incident manager, the MoH Risk Communication TWG lead, and other partners collaborated on a press release to inform the public once it became clear that social media and the public were learning about the alerts and suspected Ebola cases.

When the NTF was approached by the media at the EOC, the ministry provided an interview on the spot. Leadership did not attempt to stop the interview and reschedule after developing a consistent, straightforward message beforehand from the EOC, MoH, and NTF.

Before an emergency, such as an EVD alert or confirmed case, the EOC should develop processes and schedules for issuing clear communications with the public to reduce confusion or rumors.

Clarify the roles and responsibilities

A cross-cutting issue that was identified across multiple aspects of the SIMEX was a lack of clarity about the roles and responsibilities. In the National EOC, the responsibilities and expectations for the Incident Manager, EOC manager, Technical Working Group leads/co-leads, and other response partners were not clear. There was also confusion about which Rapid Response Team (RRT), national or state, should respond to the alert from Juba International Airport; a lack of clarity about the roles and responsibilities within the NRRT and between the NRRT and the ambulance/case management team; and about when, and by who, samples should be taken from suspect case patients. This lack of clear roles and responsibilities impacted the effectiveness of response activities and hindered the ability
of the EOC team and the NTF to make appropriate and timely decisions on a variety of topics, including activation of the EOC. Position descriptions should be developed for each of the core emergency response functions. Expectations should be clearly communicated, SOPs should be updated as needed, and additional drills and simulation exercises should be conducted.

**Yei River State Scenario**

**Rapid Response Teams**

**Strengths**

▪ The sRRT quickly mobilized upon receiving the alert, deploying within 30 minutes.

▪ The sRRT arrived at St Martha PHCC with 7 members as per the required expertise in the SOP.

▪ The sRRT lead conducted the pre-departure briefing to team members prior to their departure for the actual investigation.

▪ During the case investigation by the sRRT, the contacts of the EVD suspect case were listed immediately, making it easy to initiate contact tracing activities.

▪ The sRRT wore full Personal Protective Equipment (PPE) during transportation of the EVD suspect case, with donning and doffing carried out under strict instruction from a designated IPC team member.

**Weaknesses**

▪ Alert notification phone call by the Clinician at St Martha PHCC to the County Surveillance Officer (CSO) went through, but the CSO did not answer the call. Another phone call was made to the Director General (DG) State Ministry of Health and Environment (SMoHE), which was answered by the DG who immediately alerted the sRRT.

▪ No verification was done to gather further information until the sRRT was mobilized and had departed to the health facility where the alert notification originated. The assumption by the DG and the team was that the information received was enough and indicated that alert met the EVD case definition.
▪ The sRRT departed for the formal investigation in a convoy together with the ambulance, which means the team had decided to evacuate the suspect case to the isolation unit.

▪ Investigation of other patients with whom the EVD suspect case was admitted together over night was not done by the sRRT. Further, investigation of healthcare workers exposed to the EVD suspect case without PPE was not done.

▪ Focus was given entirely to the ‘known’ suspect case, with no attention to other individuals in the ward (no further inquiries for exposure to the vomitus and other potential exposures to the suspected case in the ward).

Ambulance Teams

Strengths
▪ Team members removed PPE one by one under the instruction of another team member (buddy control implemented stringently).

Weaknesses
▪ The EVD suspect case was put in the ambulance at 10:12am without supervision until transportation commenced at 10:30am. There was no supervision of the suspect case during transportation until arrival time at the isolation unit at 10:41am.

Isolation Unit (case management and IPC)

Strengths
▪ Availability of an EVD isolation unit and contingency stocks of IPC and medical supplies. However, the closeness of homesteads to the isolation unit makes it inappropriate for initial EVD case management in the event of an outbreak of EVD in Yei.

▪ It was observed that one designated person was in charge of instructions during donning and doffing of the PPE.

▪ Full PPE was worn by the staff during blood sample collection as stipulated in the SOPs;

Weaknesses
▪ No member of the case management team was present at the isolation unit until 17 minutes after the SRRT arrived.
The path for walking within the isolation unit was made of gravel, making it difficult for the suspect case to walk. If the surface is contaminated with the vomitus from the EVD suspect case disinfection and cleaning will be very difficult.

Disinfectant was not fully dissolved with some solid remaining inside the solution, indicating that the required concentration was not achieved.

PPE goggles were put on outside of the hood, not as stipulated in the SOPs.

During packaging of the blood sample there was no absorbent material or sealed waterproof bag between the sample tube and the plastic box, meaning that any leakage would contaminate the packaging materials.

Risk Communication

Strength

Considering contextual challenges, functional chains of communication between all partners and audiences was established and maintained.

Weaknesses

Following relevant inject in the scenario, urgent and effective messaging targeting the scenario audience was not observed (to allow no room for doubt or rumors or aimed specifically at improving public health practices by reinforcing previous and ongoing messaging with new messages).

There were no clear standards and protocols in place for communicating with and engaging the media.

There appeared to be no reference to any 72-hour plan, including communication actions relevant to announcing an outbreak.

Safe and Dignified Burial

Strength

There is a well constituted and trained Safe and dignified burial team.

Upon activation the team was able to mobilize and deploy on time

Weaknesses
It was observed that the body of the patient who died of EVD was prepared for burial by the IPC team at the isolation unit. This should be handled by the SDB team, who are better trained for this.

State Task Force

Strength

- It was observed that Yei has an active and well represented STF with strong convening power of the chairperson (the DG SMoHE), necessary backbone for leadership and coordination of a serious public health emergencies been demonstrated.
- The STF met on time when the chair called for a meeting.
- There is a one Technical working group with focal persons for different technical areas. Though it is not divided into different TWGs it serves the purpose of providing technical input into the STF

Weaknesses

- The STF is chaired by the DG SMoHE, and the government and humanitarian partners are well represented. However, there were no clear protocols for the activation and deactivation of the STF, neither for the teams to communicate with the TWGs at the national level.
- Much as the upwards and downwards internal communication was maintained to some extent, certain principles of good external and media communication practices: Be correct, be first, be credible -- to allow no room for doubt or rumours, aimed at improving the public health practices by reinforcing relevant messages and know and target the audience were not observed

Nimule Scenario

Nimule Border crossing

Strengths

- Separate tents for primary and secondary screening areas at the border between Uganda (Elegu) and South Sudan (Nimule).
- Screening using digital thermometers for all travellers.
• Availability of communication equipment and hotline for immediate reporting of the suspected case.
• Availability of trained health workers at the screening facilities.

**Weaknesses**

• Screeners not observing the physical state of the passengers, only focusing on the temperature.
• Face shield was used rather than mask for screening at points of entry.
• Need to monitor stock of all supplies including the reporting forms at PoEs - there was a shortage. PoEs did not have an updated inventory of stock available.
• All travellers including drivers of vehicles must be screened – we observed that drivers were remaining in their vehicles it is only the passengers that come out of the vehicles.
• Communication and Care for the patient at secondary screening needs to be improved (telling him or her what is happening, providing water, monitoring/securing patient luggage).
• Handwashing not done at the PoE - although there were handwashing facilities no one direct the travelers to wash their hands.
• The security unit at the PoE were not informed about the suspected case, resulting in a delayed clearance of the vehicle.
• Communication with the general public and ability to respond to community questions needs to be strengthened.

**Rapid Response Teams**

**Strengths**

- The sRRT quickly mobilized upon receiving the alert, deploying within 30 minutes.
- The sRRT arrived at the PoE with 7 members as per the required expertise specified in the SOP.
- Availability and willingness of State RRT to respond to alerts.
- Use of an RRT toolbox which contains all PPE required, IPC commodities, pens, etc.
- SOPs available and procedures followed for the investigation of the case.

**Weaknesses**
▪ No dedicated vehicle for the RRT logistics or predetermined mechanism to transport RRT members.
▪ Donning and doffing of the light PPE not as per the SOP.
▪ Clinicians in the team should play a more prominent role to ensure patient well-being.
▪ Unavailability of VHF detailed case investigation form and other documentation tools.
▪ All the RRT members used light PPE with facial mask on – this might cause panic and fear.

**Ambulance Teams**

**Strengths**
▪ Availability of ambulance at state level to transport suspected cases.
▪ Ambulance driver very professional - did not get out of the vehicle at the collection site.

**Weaknesses**
▪ The hygienist arrived with the ambulance in full PPE.
▪ Hygienist did not disinfect the secondary screening area properly.
▪ After the patient entered the ambulance the hygienist closed the ambulance door and went to the front without doffing of PPE, introducing a risk of infecting the ambulance driver.
▪ Composition of the ambulance team was not as per the protocol (Only driver and hygienists/ IPC officer

**Isolation Unit (case management / IPC /SDB)**

**Strengths**
▪ Trained health workers (in PPE) at Isolation Unit ready to receive patient.
▪ Dedicated point for ambulance to drop patient within the IU.
▪ Good triage and admission flow; to the suspect ward and later the confirmed ward.
▪ Appropriate and timely communication to family members about the procedures and findings at the IU.
▪ Availability of trained burial team and burial sites.
▪ Approach to burial and procedures were well explained to the relatives.

**Weaknesses**
▪ No separations made between moribund patients brought in by ambulance and walk-ins.
- Water bath facilities not at every entry point within the IU.
- Sample collection and packaging procedures, incomplete set of materials/tools.
- Wrong PPE sizes for some team members complicating the doffing process.
- Limit number of health workers that are receiving suspected cases.
- Continuous spraying by hygienist at the IU from reception of patient to admission in the suspect tent. Hygienist spraying the health workers within the IU and when they move.
- SDB team need to be directed/guided by their team supervisor on the place to do the donning. We observed that the donning was done in front of the ETC on the main road.
- No dedicated vehicle for transportation of corpse from the IU to the cemetery. The team used the ambulance that was used to transport the patient.
- Allocated burial site is not accessible

**Risk Communication**

**Strengths**
- Media monitoring, analysis of rumours and provision of messages to address the rumors
- Prompt sharing of information to prevent misinformation.
- There was some IEC material on EVD at the PoE screening area.

**Weaknesses**
- Poor communication about the event to the public
- There seemed to be no clear standards and protocols in place for communicating with and engaging the media

**State Task Force**

**Strengths**
- Functional STF in place with appropriate constitution of members
- Clear agenda for the meeting, targeted discussions and orderly conducted
- Sound contribution from various members
- Duration of meeting was appropriate and not too lengthy
- Clear convening power of the chair of the STF

**Weaknesses**
- Initial reluctance to convene meeting immediately.
• Need to document and track action points agreed at the meeting with clear timelines and responsibilities.
• No clear communication between STF and NTF

**Juba Scenario**

**Juba International Airport**

**Strengths**
• Well-structured port health facility with provision for secondary screening and a holding site.
• Good case detection (initial detection using thermometer, patient was efficiently isolated).
• Good and clearly identified leadership of the screening team.
• Good coordination and communication with the EOC and other relevant stake holders including immigration and airport authorities.
• Port health team demonstrated knowledge and skills.
• Adequate precautions in line with the recommended IPC practices demonstrated.

**Weaknesses**
• Inadequate communication to the other travellers regarding actions taken to isolate the sick co-traveller.
• Secondary screeners did not have contact listing forms nor appropriate case investigation forms.
• It was unclear whose job it was to get the manifest of all the passengers' names.
• There was no food or water to give the patient while in the secondary screening area.
• Inadequate crowd control.
• Nobody took care of the patient’s luggage. It was still sitting in the secondary screening area when he was taken away in the ambulance.

**Rapid Response Teams**

**Strengths**
• The rapid response team arrived at the PHCC composed of two clinicians; team lead/epidemiologist; 4 IPC staff; and 2 communications officers.
• The RRT had the full complement of a kit that included IPC supplies; PPEs; case investigation forms; IEC materials; and a vehicle.

• The team interviewed clinicians and relatives of the case to obtain collateral history about the case.

• The communication experts sensitised the patients at the health facility and provided IEC materials to the health facility.

• The epidemiologist gathered the epidemiological case details about the case and, after establishing that the case presentation was consistent with EVD, filled out the EVD case investigation form.

• The protocols on patient screening based on the case definition and filling out the case investigation form were followed.

• The procedures for donning were well followed and supervised.

• Proper disinfection of the outpatients and consultation room were undertaken by the RRT.

**Weaknesses**

• The RRT did not carry the EVD case definitions.

• The RRT team did not carry any specimen collection and transportation kits.

• Responsibility for patient monitoring and management not articulated in SOPs, resulting in the patient leaving the isolation unit without RRT awareness.

• The RRT entered isolation unit in contradiction to SOPs (creating potential for infection

• The RRT did not carry the contact listing forms and did not perform any contact listing.

• The RRT did not call the PHEOC at the end of the assessment to report the assessment findings.

• In the secondary screening area, the patient was left alone for 20 minutes with the door open in which time he left the room and was mingling with the crowd until someone noticed him.

• Lack of clarity as to which RRT has jurisdiction over the JIA, is it the Jubek state RRT or the national RRT.
• There was confusion as to whether the NRRT and ambulance should be called and dispatched at the same time or whether the NRRT should come first and call for the ambulance afterwards.
• No visuals/flow diagrams/SOPs displayed to support the surveillance teams.
• Challenges with logistic management and inventory of the available supplies.

Ambulance Teams

Strengths

▪ The ambulance team arrived in two vehicles at the same time with the rapid response team.
▪ The ambulance team was composed of a driver; two hygienists and a clinician (nurse).
▪ The RRT had the full complement of a kit that included IPC supplies; PPEs; case; and two vehicles.
▪ The ambulance team received a briefing from the RRT confirming that that patient met the case definition and therefore needed to be evacuated to the isolation facility.
▪ The ambulance team was confident and went about the preparations to evacuate the patient with confidence.
▪ There was an ambulance with a stretcher and a bucket for vomiting.
▪ The procedures for donning were well followed and supervised.
▪ Proper disinfection of the outpatients and consultation room were undertaken by the ambulance team.

Weaknesses

▪ The ambulance did not call the PHEOC after the patient was on board to report that they were leaving the health facility and heading to the isolation facility.
▪ There was confusion as to whether the ambulance team had to do another assessment of the patient when they arrived even though the NRRT had already done one.

Case management and IPC

a. Jebel PHCC

Strengths

▪ Patient registration and triage in place hence the EVD suspect was promptly attended to.
▪ Consultation room has disposable gloves; a digital thermometer; and job aids from the polio and IDSR programs.
• The health facility clinical team corroborated information on how to manage the patient by calling #6666.

• The correct diagnosis was made by the clinician.

**Weaknesses**

• Consultation room is available in the PHCC but lacked a hand washing facility (one hand washing facility outside OPD); no waste bin, and no provision to disinfect the thermometer.

• There were no EVD case definitions in the consultation room.

• The health facility lacks a holding area for suspect EVD cases, hence the patient had to be kept in the consultation room for 1.5 hours before the ambulance team arrived.

• Basic IPC amenities and practices were lacking in the consultation room.

• There was no screening station at the entrance of the health facility.

• Temperature was not taken – as the clinician indicated they did not have an infrared thermometer.

• Names, phone numbers, and address of patients, visitors, and health workers present in the health facility when the EVD suspect was identified were not registered - this would hamper follow up to prevent spread if the patient is confirmed to have EVD.

• Information about the alert hotline #6666 was not posted anywhere in the health facility.

• The call to the PHEOC connected promptly but the PHEOC delayed calling back.

• The rapid response team took another 1.5 hours to arrive at the health facility to assess the case.

• Health facility operations were brought to a standstill.

**Comments on the scenario:**

• The use of red eyes as a haemorrhagic sign complicated the clinical assessment since the actual patient did not have red eyes.

**b. Infectious Disease Unit**

**Strengths**

• Chlorine concentration was done correctly.

• Appropriate donning technique.
• Patient received properly at IDU, Screened and case admission form filled, CIF handed over to IDU screening point.
• Patient admitted into ward escorted by hygienists.
• Physical structure of IDU adequate.
• Ambulance also adequately decontaminated.
• Blood samples collected at the IDU.
• Patient adequately moved from suspect to confirmed case when PCR positive.
• Presumptive and supportive care provided at IDU.
• Adequate segregation of patients by dry and wet status.
• Weaknesses
  • Disinfection not thoroughly done.
  • PPEs sets not pre-packaged to facilitate faster donning.
  • Unnecessary touching of patient (touching should be only when necessary).
  • Inadequate communication with the patient.
  • Googles fogging quickly and some hoods not fitting.
  • Inadequate attention given to patient or suspect (patient was allowed to move into crowd).
  • Food not readily available for all patients.
  • Clinician needs to know discharge criteria and consult colleagues when in doubt.
  • No visuals/job aides/flow diagrams/SOPs displayed to support the case management teams.

Risk Communication

Strengths
• Enough IEC materials.
• Social mobiliser communicated EVD messages to passengers.
• Mobilizer gave running descriptions on what the RRT was doing.
• Key messages drafted upon declaration of outbreak.
• Press release drafted for declaration of outbreak.

Weaknesses
• Social mobilizer needs to have more interactive communication with bystanders including passengers (allow for an interactive sessions).

• Use of medical jargon, which may not be easily understood by the public.

• Psychosocial support to the patient should be provided by the RRT team, not just the PSS members; the role of the PSS members is to ensure that all RRT team members behave in a way that minimizes negative behaviours and feelings of the patient and the public.

• Communication and Coordination between NRRT, State RRTs, State TWG and the RCSMCE TWG.

**Coordination**

a) **PHEOC**

**Strengths**

• Functional EOC in place and able to coordinate the response.
• Guidelines, SOPs and relevant protocols in place.
• Effective communication and activation of the various functions.
• Quick mobilization of RRT following receipt of alert notification.
• Timely information sharing.
• Coordination of risk assessment with relevant experts.
• Toll free line # 6666 that can be used by the general public

**Weaknesses**

• Clarification of roles and responsibilities on activation of PHEOC.
• Inadequate staffing in the PHEOC leading to multitasking and delay in transmission of some information.
• Necessary to develop and implement appropriate work schedules and on-call rosters for all core EOC roles.
• Following mobilization, the RRT wasted time constituting choline solution leading to delay in arrival at the airport.
• The PHEOC does not have credit to call back using phone in the EOC, delaying returns to missed calls
• PHEOC toll free number cannot handle more than one call at a time

b) National Task Force

Strengths
• NTF/STF and TWGs in place and functional with the relevant technical expertise.
• Government and partners well represented with obvious commitment and enthusiasm from all involved.
• Support from other line ministries.

Weaknesses
• Lack of clarity on national and state level coordination linkages.
• Inadequate reference to key preparedness documents, SOPs and plans during the exercise.
• Lack of clarity on roles and responsibilities on supporting preparations of food rations at isolation units, treatment centers, contacts.
• Meetings not well structured, discussions not strategic. Meeting drifted to discussions on case definitions, which should be a discussion for TWGs.
• Access, Safety and Security TWG not fully functional at national and state levels.

c. Logistics

Strengths
• Communication on available stocks was clear.
• Sample collection within 24 hours.
• State coordination teams worked well with logistics in sample collection and transportation, which helped safety of sample transportation.

Weaknesses
• Lack of clarity on roles and responsibilities on supporting preparations of food rations at isolation units, treatment centres, contacts.
• PPEs for RRTs not pre-packed.
• There is need to ensure that key physical infrastructure in high risk states can support overall EVD preparedness and response, such as link bridge in Yambio and access road in Nimule.
Vaccination

Strengths

- Selection and training of the vaccination teams in Juba, Nimule, Yambio and Yei.
- Cold chain equipment installed and functional.
- Frontline health workers vaccinated and at minimal risk if they handle EVD case unknowingly.

Weaknesses

- No structured linkages with other TWGs, especially surveillance, for contacts that may need to be vaccinated.
- Weak coordination with the local authorities at national and state level.

Evaluation

Using evaluation forms, a total of 84 responses were completed by participants, observers and evaluators. The findings are summarized in Annex 2. On scale of 1 to 5, with 1 being ‘disagree’ and 5 being ‘strongly agree’, 59% (50/84) strongly agreed ‘that exercise helped me to identify some of my strength as well as some of the gaps in my understanding of response system, plans and procedures’. 52% (44/84) strongly agreed that the exercise helped in understanding roles during EVD response, and 69% (58/84) strongly agreed that the simulation allowed testing of response plans and systems.

Evaluators assessed specific aspects of the exercise using a scale of 1 (not performed or poorly performed) to 3 (performed well). The evaluators assessed that patient monitoring, taking care of luggage and provision of psychosocial support were not performed well at points of entry (Juba and Nimule) (see figure 1).
Regarding performance of the RRTs, the evaluators assessed that prompt deployment, crowd control, patient monitoring, identification of contacts, communication among team members and provision of psychosocial support to patients were not performed well (see figure 2). Donning and doffing of PPE, completing Case Investigation Forms (CIF), and patient assessments were performed well.
Regarding key aspects of the simulation response and the outcome of the exercise, the evaluators assessed that coordination (between national and sub-national levels, and between TWGs) and communication (among teams and TWGs) were not performed well. They assessed the infrastructure (PoEs, isolation facilities, PHEOC, Ambulances) to have been the best part of the EVD response (see figure 3). It was assessed that most of the outcomes matched the expected outcomes.

![Figure 3: Evaluators assessment of the EVD preparedness and exercise outcome](image-url)
## SIMMEX Recommendation

<table>
<thead>
<tr>
<th>S/NO</th>
<th>SIMMEX Recommendation</th>
<th>Responsible Institution/Agency</th>
<th>Timeline</th>
<th>Completion date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Review and finalize the 72-hour plan with clear roles and responsibilities and in alignment with the IMS framework</td>
<td>MOH/secretariat</td>
<td>1-2 Weeks</td>
<td>21st Sept</td>
</tr>
<tr>
<td>2</td>
<td>Review composition of the NTF to have decision makers in attendance</td>
<td>MOH/secretariat/WHO</td>
<td>1-2 Weeks</td>
<td>21st Sept</td>
</tr>
<tr>
<td>3</td>
<td>Orient members and RRTs on the Epi-Surveillance SOPs and encourage adherence to provisions such as the delineation of roles between state and national RRT</td>
<td>MOH/WHO/CDC/Consortium</td>
<td>1-2 Weeks</td>
<td>21st Sept</td>
</tr>
<tr>
<td>4</td>
<td>Clarifying role of laboratory person on the RRT in SOP for taking blood sample</td>
<td>MOH/WHO</td>
<td>1-2 Weeks</td>
<td>21st Sept</td>
</tr>
<tr>
<td>5</td>
<td>Strengthen the IDSR system to generate more EVD alerts and avoid creation of parallel system</td>
<td>MOH/WHO</td>
<td>2-4 Weeks</td>
<td>21st Sept</td>
</tr>
<tr>
<td>6</td>
<td>Develop a checklist for ambulance team actions prior to departure from Isolation Units</td>
<td>MOH/IMC/SP</td>
<td>1-2 Weeks</td>
<td>21st Sept</td>
</tr>
<tr>
<td>7</td>
<td>Refresher training for RRT lab personnel on Sample collection, packaging and Transportation SOPs; clarify roles and responsibility in the SOP handling and disinfection of blood sample packages</td>
<td>MOH/WHO/CDC</td>
<td>2-4 weeks</td>
<td>21st Sept</td>
</tr>
<tr>
<td>8</td>
<td>Develop an immediate communications plan and or SOP for outbreak declarations, press releases, interviews etc.</td>
<td>MOH/UNICEF</td>
<td>1-2 Weeks</td>
<td>21st Sept</td>
</tr>
<tr>
<td>9</td>
<td>Create a ‘cheat sheet’ of preferred messages for patients &amp; community members during alert response; train on use of the cheat sheet</td>
<td>MOH/UNICEF</td>
<td>1-2 Weeks</td>
<td>21st Sept</td>
</tr>
<tr>
<td>10</td>
<td>Develop, disseminate and test protocols for formal external communication during emergencies for all high-risk states,</td>
<td>MOH/UNICEF</td>
<td>2-4 Weeks</td>
<td>21st Sept</td>
</tr>
<tr>
<td>11</td>
<td>Ensure adequate staff are available in the PHEOC to fill core functions and these staff have only a single response function</td>
<td>MOH/WHO</td>
<td>&gt;3 Months</td>
<td>Nov 30th</td>
</tr>
<tr>
<td>12</td>
<td>Develop a template for IMS Activation and Deactivation</td>
<td>MOH/WHO</td>
<td>1-2 Weeks</td>
<td>21st Sept</td>
</tr>
<tr>
<td>13</td>
<td>Conduct a training on IMS structure, functionality and activation</td>
<td>MOH/WHO</td>
<td>2-3 Months</td>
<td>14th Oct</td>
</tr>
<tr>
<td>14</td>
<td>Training to practice safe patient handling prior to arrival at Isolation Unit</td>
<td>MOH/WHO/CDC/Consortium</td>
<td>2-4 Weeks</td>
<td>14th Oct</td>
</tr>
<tr>
<td>No.</td>
<td>Task Description</td>
<td>Responsible Parties</td>
<td>Timeframe</td>
<td>Date</td>
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<tr>
<td>15</td>
<td>Always identify/designate RRT member responsible for patient monitoring and handling</td>
<td>MOH/WHO/CDC/Consortium</td>
<td>Ongoing</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Provide correct reporting forms used at POE and regularly monitor the stock at all POE</td>
<td>MOH/IOM</td>
<td>1-2 Weeks</td>
<td>21st Sept</td>
</tr>
<tr>
<td>17</td>
<td>Conduct refresher training for screeners at PoEs with main focus on observation of physical appearance of travelers and appropriate filing of the forms</td>
<td>MOH/IOM</td>
<td>1-2 Weeks</td>
<td>21st Sept</td>
</tr>
<tr>
<td>18</td>
<td>Provide IPC mentorship and conduct drills on hygiene practices including preparation of chlorine solution, consistent and appropriate use of PPEs, decontamination practices at PoEs, in non-ETU and ETU health facilities</td>
<td>MOH/WHO/IOM/IMC/SP/WVI/AAHI/CORDAID</td>
<td>1-2 Weeks</td>
<td>21st Sept</td>
</tr>
<tr>
<td>19</td>
<td>Conduct refresher training including regular drills for the RRT</td>
<td>MOH/WHO/CDC/Consortium</td>
<td>2-3 Months</td>
<td>21st Sept</td>
</tr>
<tr>
<td>20</td>
<td>Provide pre-packaged PPEs at national and state level for RRTs</td>
<td>MOH/WHO/CDC/Consortium</td>
<td>1-2 Weeks</td>
<td>21st Sept</td>
</tr>
<tr>
<td>21</td>
<td>Logistics and Case Management TWGs to meet and agree on mode of feeding patients in isolation Units (who procures food, who prepares, should it be ready to eat etc.)</td>
<td>WFP/IMC/WVI/AAHI/CCO/RDAID</td>
<td>2-4 weeks</td>
<td>21st Sept</td>
</tr>
<tr>
<td>22</td>
<td>Improve functionality of the 6666 hotline (airtime, alert documentation &amp; follow up calls); and test functionality periodically</td>
<td>MOH/WHO/UNICEF</td>
<td>1-2 Weeks</td>
<td>21st Sept</td>
</tr>
<tr>
<td>23</td>
<td>Ensure foot baths are instituted at the different entry points within the Isolation Unit</td>
<td>MOH/WHO/IMC/SP/WVI/AAHI/CORDAID</td>
<td>1-2 Weeks</td>
<td>21st Sept</td>
</tr>
<tr>
<td>24</td>
<td>Advocate for participation of security forces in NTF</td>
<td>MOH</td>
<td>1-2 Weeks</td>
<td>21st Sept</td>
</tr>
<tr>
<td>25</td>
<td>Constitute and activate Access and Security TWG</td>
<td>MOH</td>
<td>1-2 Weeks</td>
<td>21st Sept</td>
</tr>
<tr>
<td>26</td>
<td>NFT should develop and disseminate clear protocols for the STF outlining clearly the terms of reference (ToRs) for each working group/response pillar</td>
<td>MOH/WHO/Secretariat</td>
<td>2-4 Weeks</td>
<td>21st Sept</td>
</tr>
<tr>
<td>27</td>
<td>Generate and post rosters of RRTs for PHEOC manager; ensure RRTs know contact of current PHEOC manager</td>
<td>MOH/WHO/CDC/Consortium</td>
<td>1-2 Weeks</td>
<td>21st Sept</td>
</tr>
<tr>
<td>28</td>
<td>Incorporate psychosocial support in case management and RRT trainings</td>
<td>MOH/WHO/UNICEF/IMC/SP/WVI/AAHI/CORDAID</td>
<td>2-4 weeks</td>
<td>21st Sept</td>
</tr>
<tr>
<td>29</td>
<td>At emergency onset - leadership should prioritize establishing operational periods (frequency of meeting and updates from the teams/leads), information</td>
<td>MOH/WHO/Secretariat</td>
<td>Ongoing</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>Consider developing and testing STF meeting template with rigid agenda and allocated time (e.g. tracking of action points, situation update, progress report, gaps and challenges, next steps, AoB) in high risk states</td>
<td>MOH/WHO/Secretariat</td>
<td>1-2 Weeks</td>
<td>21st Sept</td>
</tr>
<tr>
<td></td>
<td>Description</td>
<td>Responsible Parties</td>
<td>Timeframe</td>
<td>Due Date</td>
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<tr>
<td>31</td>
<td>Develop, disseminate and implement SOP for handling personal belongings of suspect cases at POEs and isolation centers</td>
<td>MOH/IOM/WHO</td>
<td>1-2 Weeks</td>
<td>21s Sept</td>
</tr>
<tr>
<td>32</td>
<td>Provide laboratory supplies including triple packaging materials at the Isolation Unit in all high-risk states</td>
<td>MOH/WHO</td>
<td>1-2 Weeks</td>
<td>21s Sept</td>
</tr>
<tr>
<td>33</td>
<td>During sample packaging, the complete triple packing should be used (i.e. absorbent material or sealed water-proof bag should be used between the sample tube and the plastic box to avoid the leak of the sample during long distance of transportation more so on bumpy roads</td>
<td>MOH/WHO/CDC</td>
<td>Ongoing</td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>More regular drills on donning and doffing for persons responsible for patient care/handling</td>
<td>MOH/WHO/UNICEF/IMC/SP/WVI/AAHI/CORDAID</td>
<td>Ongoing</td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>Develop an operational manual for the RRT's</td>
<td>MOH/WHO/CDC/Consortium</td>
<td>2-4 weeks</td>
<td>21s Sept</td>
</tr>
<tr>
<td>36</td>
<td>Ensure RRTs are trained on case investigation and contact listing forms, contact tracers are trained on contact listing and contact tracing forms and watch officers are trained on filling out alert reporting forms</td>
<td>MOH/WHO/CDC/Consortium</td>
<td>1-2 Weeks</td>
<td>21s Sept</td>
</tr>
<tr>
<td>37</td>
<td>Ensure individuals taking samples have and are trained on how to use of sample / lab forms and all other necessary documentations</td>
<td>MOH/WHO/CDC</td>
<td>1-2 Weeks</td>
<td>21s Sept</td>
</tr>
<tr>
<td>38</td>
<td>Decide on primary and secondary means of communication between national, state, and local partners during an event</td>
<td>MOH/WHO/Secretariat</td>
<td>1-2 Weeks</td>
<td>21s Sept</td>
</tr>
<tr>
<td>39</td>
<td>Create a functionality checklist (i.e. internet functional, electricity working, phones working, etc.) for the PHEOC; and drill checklist monthly</td>
<td>MOH/WHO</td>
<td>1-2 Weeks</td>
<td>21s Sept</td>
</tr>
<tr>
<td>40</td>
<td>Clarify communication procedures to ensure all alerts are documented and route through appropriate channels</td>
<td>MOH/WHO</td>
<td>1-2 Weeks</td>
<td>21s Sept</td>
</tr>
<tr>
<td>41</td>
<td>Clarify the roles and responsibilities in PHEOC including develop and implement appropriate work schedules, on-call rosters, and designate alternate team members for all core response roles to ensure the availability of qualified and trained staff when needed</td>
<td>MOH/WHO</td>
<td>1-2 Weeks</td>
<td>21s Sept</td>
</tr>
<tr>
<td>42</td>
<td>Clarify the responsibilities of partners for non-medical patient care</td>
<td>MOH/UNICEF/IMC/SP/WVI/AAHI/CORDAID</td>
<td>2-4 Weeks</td>
<td>14th Oct</td>
</tr>
<tr>
<td>43</td>
<td>train all hygienists on proper disinfection.</td>
<td>MOH/UNICEF/IMC/SP/WVI/AAHI/CORDAID</td>
<td>2-4 Weeks</td>
<td>14th Oct</td>
</tr>
<tr>
<td>44</td>
<td>Conduct mentorship and supportive supervision for handling suspected EVD cases in frontline health facilities (PHCU/PHCC) at risk for EVD</td>
<td>MOH/UNICEF/IMC/SP/WVI/AAHI/CORDAID</td>
<td>2-4 Weeks</td>
<td>14th Oct</td>
</tr>
<tr>
<td>45</td>
<td>Separate reception of walk-in patient from patient brought in by ambulance into isolation centers</td>
<td>MOH/UNICEF/IMC/SP/WVI/AAHI/CORDAID</td>
<td>2-4 Weeks</td>
<td>14th Oct</td>
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<tr>
<td>46</td>
<td>Re-train social mobilisers attached to RRTs to improve their confidence in interaction with the public</td>
<td>MOH/WHO</td>
<td>2-4 Weeks</td>
<td>14th Oct</td>
</tr>
<tr>
<td>47</td>
<td>The MOH with support from partners should establish more than two national RRTs to enable simultaneous activations</td>
<td>MOH/WHO</td>
<td>2-4 Weeks</td>
<td>14th Nov</td>
</tr>
<tr>
<td>48</td>
<td>At state level during emergencies, the taskforce chairman or designated officer should prepare and submit daily SitReps from the STF to the PHEOC/Incident Manager or a delegated officer</td>
<td>MOH/WHO/Secretariat</td>
<td>Ongoing</td>
<td></td>
</tr>
<tr>
<td>49</td>
<td>For EVD deaths in Isolation Units the SDB team should be activated to take care of the body preparation for burial as stipulated in the SDB SOP</td>
<td>MOH/WHO/UNICEF/IMC/SP/WVI/AAHI/CORDAID</td>
<td>Ongoing</td>
<td></td>
</tr>
</tbody>
</table>
**next steps:**

Based on the list of recommendations above the Strategic advisory group prioritized the following for immediate implementation

<table>
<thead>
<tr>
<th>Broad area</th>
<th>Action</th>
<th>Persons/Partners responsible</th>
<th>Completion date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plans</td>
<td>Review and finalize the 72-hour plan with clear roles and responsibilities and in alignment with the IMS framework</td>
<td>MOH/Secretariat</td>
<td>21st Sept 2019</td>
</tr>
<tr>
<td>Procedures</td>
<td>Improve functionality of the 6666 hotline (airtime, alert documentation &amp; follow up calls); and test functionality periodically</td>
<td>MOH/WHO</td>
<td>21st Sept 2019</td>
</tr>
<tr>
<td>Procedures</td>
<td>Strengthen Rapid Response teams (develop SOPs/operational manual, clarify Roles, refresher trainings, drills, Prepacked supplies)</td>
<td>MOH/WHO/Consortium/CDC</td>
<td>21st Sept 2019</td>
</tr>
<tr>
<td>Procedures</td>
<td>Establish official communications plan</td>
<td>MOH/UNICEF</td>
<td>21st Sept 2019</td>
</tr>
<tr>
<td>Procedures</td>
<td>Clarify messaging for patients and communities during alerts, investigations</td>
<td>MOH/UNICEF</td>
<td>21st Sept 2019</td>
</tr>
<tr>
<td>Personnel</td>
<td>Refresher training for PoE staff with focus assessment of travellers, psychosocial support</td>
<td>MOH/IOM</td>
<td>21st Sept 2019</td>
</tr>
<tr>
<td>Procedures</td>
<td>Develop a checklist for ambulance team actions prior to departure from Isolation Units</td>
<td>MoH/IMC/WHO/SP</td>
<td>21st Sept 2019</td>
</tr>
<tr>
<td>Personnel</td>
<td>Refresher training for RRT lab personnel on Sample collection, packaging and Transportation SOPs; clarify roles and responsibility in the SOP</td>
<td>WHO/CDC/</td>
<td>21st Sept 2019</td>
</tr>
<tr>
<td>Coordination</td>
<td>Re-set Access safety and security TWG</td>
<td></td>
<td>21st Sept 2019</td>
</tr>
<tr>
<td>Coordination</td>
<td>Review composition of the NTF to have decision makers in attendance</td>
<td>MOH/WHO/Secretariat</td>
<td>21st Sept 2019</td>
</tr>
</tbody>
</table>
Annexes

Annexe 1- List of facilitators/Evaluators

<table>
<thead>
<tr>
<th>Location</th>
<th>Exercise Control room</th>
<th>Facilitators</th>
<th>Evaluators</th>
<th>Functions to be evaluated</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2. Juma Hassen (WHO Juba)</td>
<td>2. Dr Abraham Adut (WHO Juba)</td>
<td>2. Ishata Conteh (WHO AFRO)</td>
<td>Surveillance (PoE, RRT)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
<td>3. Dr. Francis Nyakoojo (Consortium)</td>
<td>Case management/IPC/SDB</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>4. Dr Wamala Joseph WHO Juba</td>
<td>Surveillance (HF, RRT)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2. Ms. Pauline Nafula (MOH Kenya)</td>
<td></td>
</tr>
<tr>
<td>Juba</td>
<td>1. Dr. Otim Ramadan (WHO Juba)</td>
<td>1. Aimee Summers (CDC)</td>
<td>1. Daniel Wako (CDC)</td>
<td>EOC/Coord/ risk Comm</td>
</tr>
<tr>
<td></td>
<td>2. Mary Stephen (WHO AFRO)</td>
<td>5. Dr Austin Taylor Jones (WHO AFRO)</td>
<td>3. Richard Garfield CDC</td>
<td>Surveillance (PoE, RRT)/ &amp; Case management/IPC/SDB</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. David Throp (OCHA Juba)</td>
<td>2. Mpairwe Allan (WHO AFRO)</td>
<td>Surveillance (PoE, RRT)/ &amp; Case management/IPC/SDB</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5. Alice Igale (WHO Juba)</td>
<td>4. Dr Everistus Aniaku (NCDC)</td>
<td>EOC/Coord/ risk Comm</td>
</tr>
<tr>
<td></td>
<td>6. Edmund Nabena (IMC)</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>3. Dr. Abdoul Bing (Consortium)</td>
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</tbody>
</table>
Annex 2. Summary of Exercise feedback

Summary of Evaluation for the Full scale simulation (n=84)

- At the end of the exercise, I think we are better prepared for a health emergency.
  - 1 (Disagree): 3, 14, 37, 26
  - 2: 5, 23, 50
  - 3: 5, 29, 44
  - 4: 7, 14, 58
  - 5 (Strongly Agree)

- The exercise helped me to identify some of my strength as well as some of the gaps in my understanding of response system, plans and procedures.
  - 1: 4, 5, 23, 50
  - 2: 5, 29, 44
  - 3: 7, 14, 58
  - 4: 7, 13, 24, 33
  - 5: 1, 26, 49

- The exercise improved the understanding of my role and function during an emergency response.
  - 1: 4, 5, 23, 50
  - 2: 5, 29, 44
  - 3: 7, 14, 58
  - 4: 7, 13, 24, 33
  - 5: 1, 26, 49

- The exercise allowed us to test our response plans and system.
  - 1: 4, 5, 23, 50
  - 2: 5, 29, 44
  - 3: 7, 14, 58
  - 4: 7, 13, 24, 33
  - 5: 1, 26, 49

- The briefing before the exercise was useful and prepared me for the exercise.
  - 1: 1, 5, 26, 49
  - 2: 3, 14, 38, 20
  - 3: 4
  - 4: 5 (Strongly Agree)

- The scenario was realistic.
  - 1: 1, 5, 26, 49
  - 2: 3, 14, 38, 20
  - 3: 4
  - 4: 5 (Strongly Agree)

- The exercise was well structured and organized.
  - 1: 1, 5, 26, 49
  - 2: 3, 14, 38, 20
  - 3: 4
  - 4: 5 (Strongly Agree)