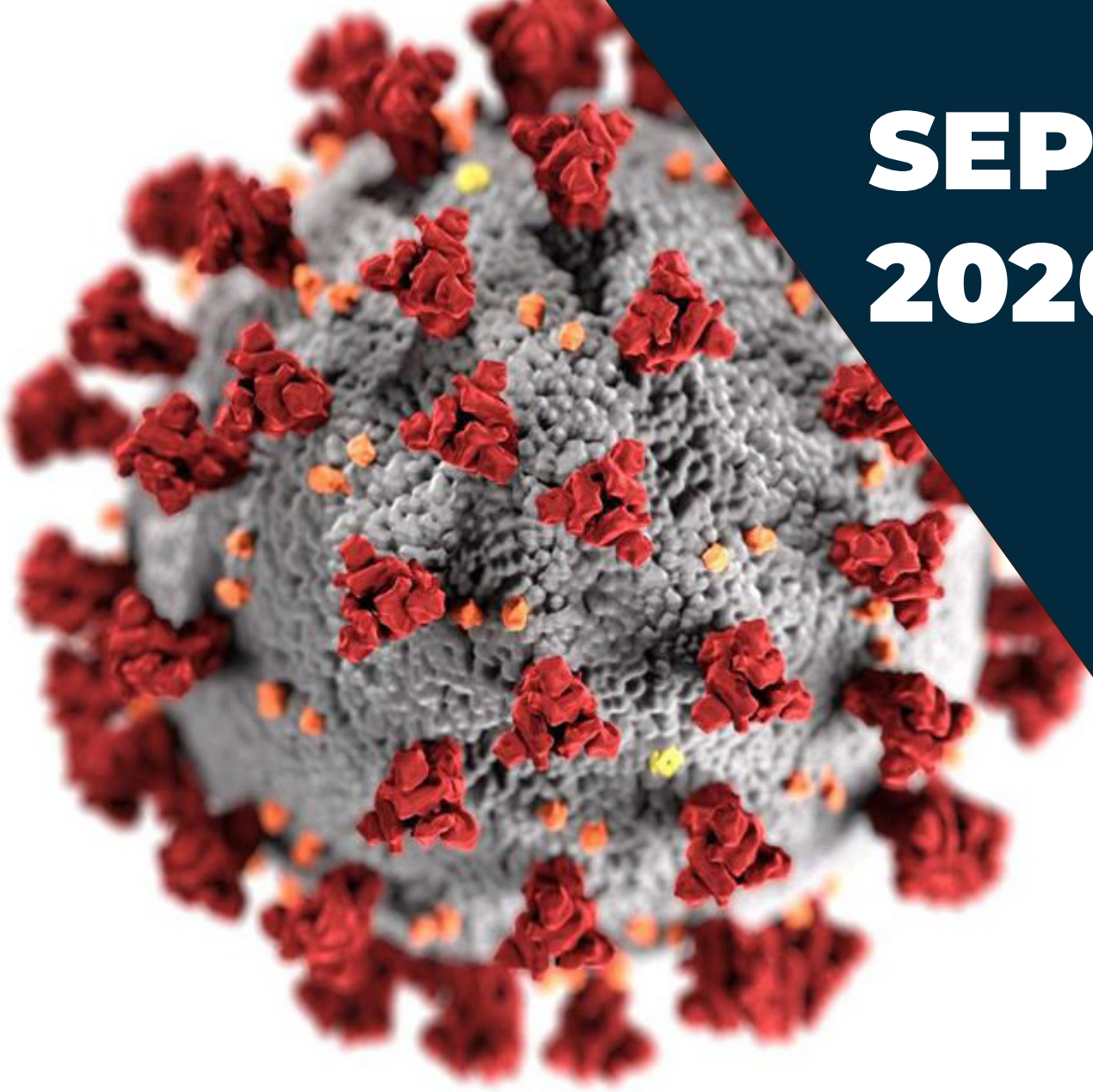


SEPT 2020

INTRA ACTION REVIEW (IAR) OF THE ZAMBIA COVID-19 OUTBREAK RESPONSE

COVID-19 Outbreak Response IAR report

ZNPHI World Health Organization CDC

MIKA CONVENTION CENTRE, CHONGWE, ZAMBIA
23-25 SEPTEMBER, 2020

ZAMBIA COVID-19 INTRA-ACTION REVIEW (IAR)

REPORT

Contents

ABBREVIATIONS

AFENET	– African Field Epidemiology Network
BID	– Brought in dead
CDC	– Center for Disease Control and Prevention
COVID-19	– Coronavirus disease 2019
DMMU	– Disaster Management and mitigation Unit
EHS	– Essential Health Services
FPP	– Focal Point Person
IAR	– Intra-action Review
IDSR	– Intergrated Disease Surveillance and Response
IEC	– Information, Education, Communication
ILI	– Influenza-like Infections
IMS	– Incident Management System
IPC	– Infection Prevention and Control
MOH	– Ministry of Health
NIC	– National Influenza Centers
PIP	– Pandemic Influence Surveillance Program
POE	– Points of Entry
PPE	– Personal Protective Equipment
RCCE	– Risk Communication and Community Engagement
RRT	– Rapid Response Teams
SA-RCC	– Southern Africa Regional Collaborating Center
SARI	– Severe Acute Respiratory Infection
SOP	– Standard Operating Procedure
SVM	– School Vetinary Medicine
TB	– Tuberculosis
UTH	– University Teaching Hospital
VHF	– Viral Hemorrhagic Fever
WASH	– Water Sanitation and Hygiene
WHO	– World health Organization
ZNPHI	– Zambia National Public Health Institute

1. RATIONALE AND METHODOLOGY OF THE REVIEW

The Zambia Intra Action review (IAR) was conducted to provide an opportunity to review the functional capacity of the public health emergency response systems at national and subnational levels. The aim was to identify practical areas that needed immediate remediation or targeted for sustained improvement in the COVID-19 response.

The objectives of the IAR are as follows:

- To provide an opportunity to share experiences and collectively analyse the ongoing in-country response to COVID-19 by identifying challenges and best practices;
- To facilitate consensus building among and compiling lessons learnt by various stakeholders during the response, to improve by sustaining best practices that have demonstrated success and preventing recurrent errors.
- To document and apply the lessons learnt from the response efforts to date to enable health system strengthening.
- To provide a basis for updating and validating the country's COVID-19 strategic preparedness and response plan and other strategic plans accordingly.

1.1. Scope of the Zambia COVID 19 IAR

Zambia has been responding to the COVID-19 outbreak since March, 2020 and has accumulated experience which necessitated the review process in order to consider strategic modifications to the response plan. The IAR was based on the WHO COVID-19 strategy update of 23rd July, 2020 focusing on the following pillars of the COVID-19 response:

- Country-level coordination, planning and monitoring
- Risk communication and community engagement
- Surveillance, case investigation and contact tracing
- Points of entry
- National laboratory system
- Infection prevention and control
- Case management and knowledge sharing about innovations and the latest research
- Operational support and logistics in the management of supply chains and the workforce
- Maintaining essential health services during the COVID-19 outbreak

Although the pillar on maintaining essential health services during the COVID-19 outbreak was not incorporated in the IMS structure, it was reviewed under the coordination and planning pillar during the IAR.

1.2. **Methodology**

The Ministry of Health through the Zambia National Public Health Institute (ZNPHI) and other stakeholders involved in the emergency response within and outside the health sector held several prior virtual meetings where background information was collected and reviewed. To ensure a well-coordinated process of the IAR, pillar leads and facilitators were identified and trained during which tools were shared. Trigger questions were selected from the IAR package and were refined to ensure important themes of the pillars under review were covered. The team designed an intra action review format that was for onsite and virtual.

Taking into consideration the infection prevention and control measures, only fifteen members per pillar were allowed to attend the onsite meeting while the rest of the members attended virtually.

The following steps were followed to conduct the IAR:

- Identification of actions taken during the response
- Analysis of the gaps and best practices
- Identification of actions to strengthen or improve performance and how to follow up

2. FINDINGS

2.1. Country-level coordination, planning and monitoring

• Observations	
Best practices	• Situational reports and updates shared consistently with response teams • Monitoring supply chains to strengthen logistical and responsiveness on the part of cooperating partners • Daily Minister's meeting and daily updates • Activation of the IMS at National, Provincial and district levels and seamless integration with surveillance • Policy briefs and media statements developed to guide government decisions based on disease epidemiology • Engagement of multiple partners/sectors in the response • Utilization of the troika platform by cooperating partners for advocacy and resource mobilization • IMS coordination activated and operational at national and sub-national level • Decision making at technical and policy level are in synchronization • Southern Africa Regional Collaborating Centre (SA-RCC) of Africa Centres for Disease Control and prevention (Africa-CDC) weekly meetings which share best practices • IMS more multisectoral and not so heavy leaning on health sector

Challenges	• Inadequate funds for COVID-19 preparedness measures following onset of the global pandemic in other countries • Inadequate linkage of policy directives and technical recommendations in implementing COVID-19 measures • Testing of the preparedness plan at outbreak onset not done through drills or simulation exercises • Forecasting did not address some important aspects of the response e.g. surge capacity, financial resources • Unclear guidance on roles and responsibilities due to slow initial response • Inadequate identification of gaps and leveraging of resources due to absence of intra multisectoral collaboration meeting • Public Health Guidelines were disseminated in soft copy but not easily accessible to all • Global response and recommendations that had been changing quite often due to too many unknowns around the Covid19 virus that disabled to provide consistent recommendations and guidance • Response personnel were not trained on IMS resulting in lack of preparedness for its establishment and coordination challenges • Concentration of expertise and response personnel at the national level resulting in uneven distribution at the subnational level • Communication between the pillars and response coordination at the national and subnational level require strengthening • Delayed data and information flow needed for strategic decision making
• **Recommended actions**	

a. For immediate implementation:
    a. a.Advocate for review of multisector plans resource allocation with regard to emergency response
    b. b.Advocate for institutionalization of emergency preparedness and response in all line ministries
    c. c.Finalize, validate and disseminate the national action plan for public health security (NAPHS)
    d. d.Develop monitoring and supervision tools for implementation of identified actions
    e. e.Outbreak response plans to include extra remuneration for responders (e.g financial, meals, psychological and material support)
    f. f.Improved mapping of key players during preparedness
    g. g.Identify and distribute expertise and response personnel at the national and subnational level
    h. h.Reorient and train response personnel on foundational Incident Management principles and overview of key functional IMS roles to improve COVID-19 preparedness and response
    i. i.Establish timely communication channels for regular and frequent communication between the pillars and response coordination at the national and subnational level
    j. j.Develop timely data and information sharing between pillars and response coordination at the national and subnational level

b. For mid to long-term implementation to improve the response to the ongoing COVID-19 outbreak:
    a. a.Scaleup capacities in emergency preparedness and response at national and subnational levels
    b. b.Monitoring the linkage of health and non-health aspects of the outbreak.
    c. c.Strengthen inter and intra communication to ensure coherence throughout the response
    d. d.Conduct regular reviews of contingency plans to inform future response
    e. Include a pillar on essential health services to monitor and ensure continuation of essential health services provision during future outbreaks

2.2. Risk communication and community engagement

• Observations	
Best practices	**Public Communication** ○ Use of a multimedia campaign that includes TV/Radio/Print/social media/ digital and community-based channels. ○ Strong media partnerships involving early media engagement and negotiations for free programme/announcements slots ○ (Uniformity of messages used by RCCE partners. A Message guidance package for responders was developed and is updated as new messages are produced. It is policy for all messages to be standardized and approved by the Ministry of Health before dissemination. ○ COVID 19 Messages embraced various topics and target audiences. ○ Use of the WhatsApp BOT to engage with communities and disseminate information ○ Development and distribution of IEC materials in English and local languages early on in the outbreak ○ The use of Community radio to reach all communities with messages in languages they can understand particularly in rural areas ○ Media programmes and IEC material produced in local languages and braille ○ Ongoing material development and review to keep up pace with the evolving pandemic ○ Use of existing platforms to conduct surveys, collect data and disseminate information ○ Use of free Wi-Fi hotspots for information dissemination **RCCE Systems, Partner Coordination and Communication** ○ oPartner mapping and Establishment of coordination and communication structures at national and sub-national levels ○ oStakeholder and partner support for logistics and resource mobilisation ○ oDevelopment of National RCCE plan with M and E framework and at district levels ○ oInnovation through the use of virtual platforms to hosting regular meetings for RCCE pillar and its sub groups including provinces and districts in order to ensure coordination of the RCCE during the outbreak response ○ Capacity building of RCCE teams in high risk districts and provincial and district health promotion officers on RCCE planning, coordination. **Community Engagement** ○ Development of SOPs for community engagement ○ Use of the Public Address Systems to disseminate information ○ Employment of door to door sensitisation strategy through the engagement of community volunteers and youth volunteers to conduct sensitization in the communities ○ Engagement of traditional leaders (chiefs and headmen through the Ministry of Chiefs and Traditional Affairs) ○ Engagement of religious and other influential community leaders such as market masters and transport associations ○ Use of congregate settings as part of community engagement activities ○ Targeting and engagement of high-risk groups such inmates during community engagement activities

Challenges	○ Duplication of efforts arising from poor coordination and some partners operating in silos ○ Available resources were not sufficient to cover the planned activities ○ Poor RCCE coverage of districts, rural areas and villages ○ Poor publicity around the WhatsApp bot as a data platform ○ Publication of reports is labour intensive and data to feed into the reports is not always readily available. This has resulted in a reduction in the number of reports produced ○ Situational reports and daily COVID-19 updates were irregular which resulted in low risk perception ○ The data from the call centre has not been readily available to feed into the dynamic listening and decision making of the sub-committees ○ Development of materials has not kept pace with the rapidly evolving situation ○ Processes for the development and approval of IEC materials and messages was protracted. ○ Stigma around persons who test positive for COVID-19 ○ Cultural norms were overlooked in some instances e.g. teams did not present tokens to chiefs/traditional leaders ○ Policy pronouncements caught the implementers off guard and there was not enough time to adequately respond and prepare the communities. ○ Communities expectation of provision of masks along with messaging dissemination as has been the case with other outbreaks e.g. provision of soap and chlorine during cholera outbreaks ○ Low risk perception of the public and non-compliance to public health measures. ○ Variable capacity among journalists at communicating emergency health information may lead to messages conveyed that don't stress the key points
• **Recommended actions**	
	- a.For immediate implementation: - Establish a clearance process that accounts for incoming, rapidly changing information as well as timely release of communication products. - Provide timely responses to queries for information - Improved microplanning to incorporate activities targeted at schools - Utilise language of play in the development of messages for learners - Improved coordination with the education sector and the Ministry of Education structures at district and provincial levels in order to effectively identify targets for school outreach activities. - Identify populations in districts, rural areas, and villages, as well as attitudes, beliefs, and languages. - b.For mid to long-term implementation to improve the response to the ongoing COVID-19 outbreak: - Integrate the WhatsApp bot into the call centre so as to reduce the burden on the call centre staff as well as into SMS blast messages - Identification of unique RCCE needs of rural communities and improved outreach - Identification of unique RCCE needs of vulnerable/differently abled communities and improved outreach - Development of materials in additional local languages other than the 7 main ones used

2.3. Surveillance, case investigation and contact tracing

• Observations	
Best practices	○ Development and dissemination of the integrated COVID-19 guidelines and SOPs for Zambia ○ Availability of case definitions, guidelines and tools for COVID-19 ○ Strong leadership and political will ○ Alert communication and management by DMMU was useful in directing RRTs response ○ Rapid mobilization and deployment of multi-disciplinary responders in the facilities and communities ○ Large scale targeted community screenings and testing ○ Placement of data collectors at the major laboratories to help in data management allowed for timely contact tracing ○ Provision of Technical Support from partners. ○ Epidemiological data was analysed and reported on a daily basis for all the key variables as stipulated by WHO ○ Aggressive contact tracing when cases were fewer in early part of outbreak ○ Utilization of surveillance tools for contact tracing such as form E and form D ○ Provision of COVID-19 updates to the RRTs ○ Support from WHO, Africa CDC, AFENET for contact tracing and monitoring ○ Capacity building of swabbers and data collectors ○ Electronic platform (Kobocollect) was introduced for capture of field data

Challenges	○ Partner fatigue due to protracted length of the outbreak ○ Few RRTs members involved in the response due to lack of motivation resulting in increased fatigue and stress levels ○ RRT program was not established prior to the response ○ ○ RRT deployers have not received COVID-19 specific just in-time training ○ Too many forms (paper/electronic) to fill in during contact tracing, mass screening and testing and reviewing alerts, hence higher chances of omissions and making mistakes. ○ Inadequate use of the IDSR in health care system for COVID-19 ○ Inadequate use of electronic platform for data collection, which has impacted data quality and ability to fully utilize epidemiological data to inform decision making ○ Unexpected logistical requirements from line ministries which supported the response e.g. servicing of vehicles ○ Delayed turnaround time for PCR tests results (more than 72 hours up to 7-14 days at a certain moment). ○ Poor communication of results to clients who following testing. ○ Inadequate funds to support response demands e.g. airtime, bundles, stationery, refreshments, transport and surge staff, operationalize and rollout CommCare data management system ○ Mismatch between increased testing demands and laboratory capacity ○ Non-involvement of community-based volunteers in contact tracing ○ Delayed communication of results following swabbing of truck drivers which resulted in lack of cooperation. ○ Conflicting instructions to the response teams by different levels of health care system e.g. on contact tracing, testing, and alert response ○ No psychological help rendered to patients and responders ○ Data sits on different data bases hence not able to perform detailed analysis ○ Lack of proper system to share the results with end users ○ Centralization of data resulting in delayed transmission of data to sub-national levels ○ Non-availability of country-wide prevalence rates to inform decision making
• **Recommended actions**	

a. For immediate implementation:

a. Response activities to be guided by scientific methods and epidemiological data
b. Provide airtime for bundles for uploading data on KoboCollect and talk-time for communication with clients.Provide clear signage to guide flow and important steps for passengers to follow.
c. Motivate staff working in emergency response through staff recognition, providing rest and recuperation time to reduce fatigue and stress
d. Increase the involvement of community-based volunteers in contact tracing
e. To strengthen utilization of IDSR system at all levels of the health care and integrate all COVID-19 reporting tools into the IDSR system.
f. Incorporate an automated system for communication of results to clients
g. Strictly adhere to the IMS structure in communicating commands and instructions to the response teams
h. Establish a Rapid Response Team management team dedicated to the training and wellbeing of RRT deployers
i. Conduct deployer readiness and COVID-19 just in-time training
j. Incorporate psychosocial counsellors in the RRTs to address psychologicalhallenges faced by patients and respondersMoH/ZNPHI to provide regular technical support supervision, mobilize material and financial support for responder
k. Disseminate COVID-19 results database to PHS and surveillance staff in the provinces in real time
l. To conduct prompt and representative (country-wide) prevalence studies to generate evidence to guide decision making

b.For mid to long-term implementation to improve the response to the ongoing COVID-19 outbreak:

a. Operationalize new COVID-19 testing sites in all the provincial hubs in order to strengthen COVID-19 surveillance.
b. Surveillance and laboratory teams to liaise on average number of people to test per day in line with laboratory capacity.
c. Mobilise financial and material resources to support various response needs continually.
d. Train, engage and incentivise community-based volunteers in COVID-19 response e.g. Health promotion, contact tracing, community case management.
e. Surveillance cluster to activate the weekly epidemiological data analysis and utilization meetings for prompt detection of events of public health importance
f. Develop a COVID-19 surveillance strategy with short-term and long-term goals to enhance surveillance in Zambia
g. Consider opportunities for research related to COVID-19 collateral damage and benefits

2.4. Points of Entry

• Observations	
Best practices	• Capacity building on surveillance, IPC and data management to POE staff • POE surveillance was helpful in establishing areas of potential threats • Multisectoral approach in surveillance at POE • Existing cross border surveillance collaborations with neighbouring countries • Screening and monitoring of travellers at POE • Provision of the thermal scanners and hand-held infrared thermom-eters • Timely provision of IEC materials at POE • Availability of data collection tools at POE • Availability of partner support (AFENET, WHO) towards monitoring of travellers on quarantine using mobile phones • Provision of flight manifest by the national airports' cooperation • Consistent 14 day follow up of travellers passing through airports at the beginning of the outbreak
Challenges	• Inadequate supplies, equipment and other logistics at POE e.g., PPES, gloves, swabs, airtime, data bundles, tablets and transport • Lack of uniformity in processes and data management at POEs such as irregular support, multiplicity of varied and conflicting instructions • Difficulties in managing efficiently all PoE and especially land ones • Inadequate risk communication at PoEs • Lack of signage to guide travellers on processes
• Recommended actions	

a. For immediate implementation:
    a. Provide adequate supplies and other logistics such as PPEs, tablets and air time commensurate with the demands of the POE
    b. Consistent and harmonized instructions to come from the IMS structure in order to avoid conflicting guidance at sub-national levels
    c. Provide clear signage to guide flow and important steps for passengers to follow
b. For mid to long-term implementation to improve the response to the ongoing COVID-19 outbreak:
    a. Train staff in risk communication and provide information note to travellers
    b. Provide dedicated transport at POE
    c. MoH/ZNPHI to provide regular technical support supervision, mobilize material and financial support for responders

2.5. The National Laboratory System

• Observations	
Best practices	○ Existence of pandemic influenza surveillance program (PIP), national influenza centres (NIC) and viral haemorrhagic fever (VHF) laboratories ○ Presence of competent personnel, skills and supplies for the start up process ○ The laboratory pillar was very proactive about introduction of gene xpert on the market, team constituted to identify labs and conduct assessment to improve biosafety even before cartridges were available ○ Use of existing laboratory infrastructure ○ Sentinel facilities were available for influenza like infections (ILI) and severe acute respiratory infections (SARI) ○ Opening of private laboratories helped to increase public accessibility to testing services. ○ Central reporting, data management through the confidentiality and data declaration as well as mandatory sharing of data for surveillance and bio banking. ○ Government and partner commitment to procurement of supplies ○ Epidemiologic numbers used within the laboratory network are shared which helps for quick return of results ○ All laboratories were subjected to quality assurance tests before being accredited as SARS-COV2 testing laboratories

Challenges	• Inadequate coordination, prioritization, consultation and capacity for COVID-19 testing strategies • Non-availability of testing strategies resulted in adhoc testing methodologies • No incentives provided for staff • Communication not clear on where to take samples between School of Veterinary Medicine (SVM) and UTH • Lack of cooler boxes for the RRTs due to stacks of unprocessed samples • Delays in processing samples from BIDs and in-patients • Missing variables on laboratory forms and some samples not accompanied by forms led to time lost sorting samples • The laboratory was unable to stock pile supplies that could sustain the demand due to limited market availability of supplies • Lack of in country capacity (engineers) to service and maintain equipment • Emergency procurement of supplies was not initially in place until later in the outbreak • Lack of a dedicated sample transport system
• **Recommended actions**	

a. For immediate implementation:
    a. Capacity building of national and sub-national levels to the incidence management system (IMS) to improve coordination
    b. Develop a COVID-19 testing strategy based on scientific evidence to guide methodology
    c. Review contingency plan and mobilize resources to help laboratories with reagents to facilitate scale up and continued testing
        i. Generate an immediate needs request to partners for 3-6months
        ii. Develop comprehensive laboratory reagents contingency plan
    d. Improve results turnaround time by prompt analysis of samples in line with laboratory SoPs and testing strategy
    e. Quality Assurance and proficiency testing, Intra-lab testing to be prioritized
    f. Develop systems for sample tracking from point of collection to lab e.g bar-coding
    g. Encourage the laboratory team to analyze laboratory data to generate evidence to inform decision making
    h. Quick processing of samples for in-patients and brought in dead (BID) to facilitate timely decision making

b. For mid to long-term implementation to improve the response to the ongoing COVID-19 outbreak:
    a. Develop a digitized system for sample and results management
    b. Build capacity in-country for servicing laboratoy equipment
    c. Explore use of alternative samples e.g saliva

2.6. Infection Prevention and Control

• Observations	
Best practices	○ Training of staff held (provincial and district level, tertiary hospitals) ○ Partner support e.g sinking of boreholes for isolation facilities ○ Multi-modal strategy ○ Ongoing spot checks in the community to ensure compliance ○ Incorporation of all sectors in the development of guidelines ○ Dissemination of IPC SOPs and guidelines ○ Development of tools for monitoring IPC in POEs and facilities ○ Working with local authorities and local leaderships in fostering compliance ○ Conducting IPC orientations in schools ○ Existence of an IPC program at national level to oversee IPC country-wide ○ Training of IPC trainer of trainers
Challenges	○ Poor coordination of trainings between MoH and Partners resulting in duplicity of efforts, insufficient district coverage and incomplete practical demonstrations ○ Poor enforcement of public health measures by relevant authorities ○ Low risk perception by the public on COVID-19 led to poor compliance to IPC measures ○ Inadequate knowledge and skills in IPC among health care workers coupled with poor atitude ○ Limited PPE and variations in types used ○ Inadequate water supply for IPC in some facilities ○ Poor monitoring and supervision of burials in line with recommended IPC guidelines due to delayed COVID-19 results ○ Indiscriminate disposal of surgical masks in the community ○ Poor waste segregation and color coding in the health facilities
• Recommended actions	

a. For immediate implementation:
    a. MoH and partners to plan, and coordinate scale up IPC trainings for health care workers at all levels of the healthcare system and conduct regular compliance monitoring
    b. To strengthen health promotion activities at community level to raise index of suspicion and improve compliance to recommended measures
    c. Provide clean, adequate and safe water supply in all health facilities to promote hand hygiene
    d. Prioritise processing samples from BIDs to enable timely supervision of burials
    e. Provide guidelines, ongoing sensitization and monitoring on proper disposal of surgical masks in the community
    f. Adhere to stipulated waste management guidelines on waste segregation and colour coding at all times

b. For mid to long-term implementation to improve the response to the ongoing COVID-19 outbreak:
    a. Institutionalise IPC; all facilities to have IPC/WASH FPP
    b. Review IPC guidelines to suit the local context incorporating lessons learnt from the response
    c. Support non-incineration methods of waste management in keeping with global green and health hospitals
    d. Ensure focused procurement of IPC logistics to suit local requirement.

2.7. Case management and knowledge sharing about innovations and the latest research

• Observations	
Best practices	• Use of electronic forms, guidelines and applications which were easy to access • Involvement of case management team in planning and distribution of logistics • Online platforms with digitalized copies of training materials • Introduction of the community case management model reduced the pressure on the health system • Guidelines and SOPs developed on case management
Challenges	• Inadequate technical expertise to manage severe cases • Limited supplies for case management • Infection of several HCWs involved in case management • Limited capacity of isolation facilities • The health care system was ill prepared for the surge in cases especially from Nakonde • Private sector not included from the outset • Lack of appreciation of the role of IMS by some offices in trying to get information especially when mapping out human resources • Most people wanted formal appointment through established channels to be added to the multidiscplinary response teams • Trainings initially funded by government did not incorporate private sector • Few people commited to case management due to fear of the disease and all its unknowns • Lack of guidance on some controversial issues such as re-testing • Slow trickle down of guidelines to the lower levels • Treatment protocols were not put in print for fear of the rapidly changing situation • Data from the clinical team not used to guide distribution of oxygen concentrators • Online platform developed for quick access to training materials was not authorized resulting in delayed access to training materials and implementation • Results were not timely • Lack of SOP on patient transfer to isolation centres • Lack of financial support given to vulnerable groups affected with COVID-19, this resulted into resistance to facility isolate or failure to observe public health guidelines.
• Recommended actions	

a. For immediate implementation:
    a.
    b. Strengthen SOPs on ambulance and patient movement
    c. Improve coordination between public health and case management for assessments of home environment for community management
    d. Provide interim guidance always despite rapid changes in the outbreak situation
    •
b. For mid to long-term implementation to improve the response to the ongoing COVID-19 outbreak:
    a. Strengthen coordination for patient care from all entry points with the referral mechanism
    b. Early incorporation of the private sector and adequate mobilization of funds
    c. Strengthen social protection and linkage to social support mechanisms with relevant government departments

2.8. Operational support and logistics in the management of supply chains and the workforce

• Observations	
Best practices	○ Adequately trained human resources capable of responding to emergencies ○ Integration of provincial updates in the national IMS meetings ○ Technical and operational leadership working in tandem ○ Leveraging existing systems e.g. IDSR ○ Expedited emergency procurement processes ○ Interoperability of logistics systems and regular reporting of logistics status
Challenges	• Planning was limited, forecasting did not take into account that the outbreak would be protracted • Evidence initially did not indicate that everyone would need masks • Inadequate financial resources for procurement of required resources resulting in lots of deficiencies • Unclear distribution plans/not proactive • Did not adequately anticipate increased case numbers • Difficulties in sourcing logistics from suppliers • Incorrect quantities in stock due to poor coordination and planning as well as "partner competition" • Duplicity of efforts • Lack of transparency with regard to donations, reduced buy-in and number of donations • Meetings not regularly held and adaptive management not in place • Lack of tools for forecasting logistical demands • Tendency of IMS members to field more questions than solutions • Conflicts arising from failure to understand the IMS roles vs operational roles • Waiting time to have logistics arrive in country and the challenges posed to Healthcare Workers in the field • Poor logistic management at all levels resulted in delayed identification of stock-outs • Differences in quality of commodities procured locally versus internationally. International commodities were better
• Recommended actions	

a. For immediate implementation:
    a. Ensure availability of distribution plans at all times
    b. Utilisation of existing technologies for supply chain management
    c. Facilitate full participation in the IMS for all key players
    d. Support leads of the IMS sections to actuate section objectives
    e. IMS operations should be guided by plans developed through multisectoral collaboration
    f. Preventive maintenance plan for various equipment must be prioritized
    g. Consitent monitoring and provision of supportive supervision to the response at national and subnational levels
    h. Use available epidemiologic data to inform logistics planning
    i. Develop human resource surge plan for logistics
    j. Streamline request procedures for emergency procurements to avoid protracted processes
    k. Finalise partner mapping and coordination tool for logistic management at all levelsStrictly adhere to non-disclosure of information shared during closed meetings to the public that tends to be misconstrued and may results in panic
    l. Strictly adhere to non-disclosure of information shared during closed meetings to the public that tends to be misconstrued and may results in panic
b. For mid to long-term implementation to improve the response to the ongoing COVID-19 outbreak:
    a. Ensure operational support and logistics are capable of handling concurrent outbreaks
    b. Plan and conduct trainings for logisticians in emergency operations
    c. Replicate logistic coordination structures at subnational levels
    d. Conduct quantification and procurement planning
    e. Promote transparency among partners on available support and expected duration
    f. Replicate partner support and resource mobilization systems at sub-national levels
    g. Prioritize focused procurement and delivery of supplies
    h. Ensure prequalification and consideration of local suppliers able to deliver quality commodities

2.9. Maintaining essential health services during the COVID-19 outbreak

• Observations	
Best practices	• HIV/ART care continued during the outbreak • Maternal and Child health services continued including implementation of child health week activities • TB and malaria active surveillance continued • Continued active surveillance for other reportable diseases using IDSR • Consistent release of funds for essential services from GRZ and partners • Continued targeted mentorship/tactical support to ensure strengthened EHS • Availability of guidelines for the provision of essential health services • Monitoring and evaluation continued sharing trends on various indicators
Challenges	• Absence of EHS pillar on the IMS structure • In the early stages of the outbreak, there was a reduction in the number of people accessing EHS due to fears of getting the infection • Absence of a plan for continuity of essential health services during outbreaks/public health events • Inadequate focus and evaluation of essential health services provision during the COVID-19 response • Lack of provision of adequate services for NCDs during COvid-19 proved to be a serious challenge and risk in Zambia

• Recommended actions

- For immediate implementation:
  - To conduct an in-depth analysis on the impact of COVID-19 on essential health services
  - Set up the EHS pillar on the IMS structure
  - To ensure RCCE is enhanced at the onset of the outbreak
  - Prioritize essential health services provision in the communication strategy
  - Monitor provision of essential health services during outbreaks through the use of interactive platforms such as the situation room
  - Plan and conduct studies on the impact of COVID-19 pandemic on healthcare seeking behavior
- For mid to long-term implementation to improve the response to the ongoing COVID-19 outbreak:
  - Plan for continuity of essential health services during public health emergencies

3. THE WAY FORWARD

Describe the strategy for implementing the activities identified during the IAR:

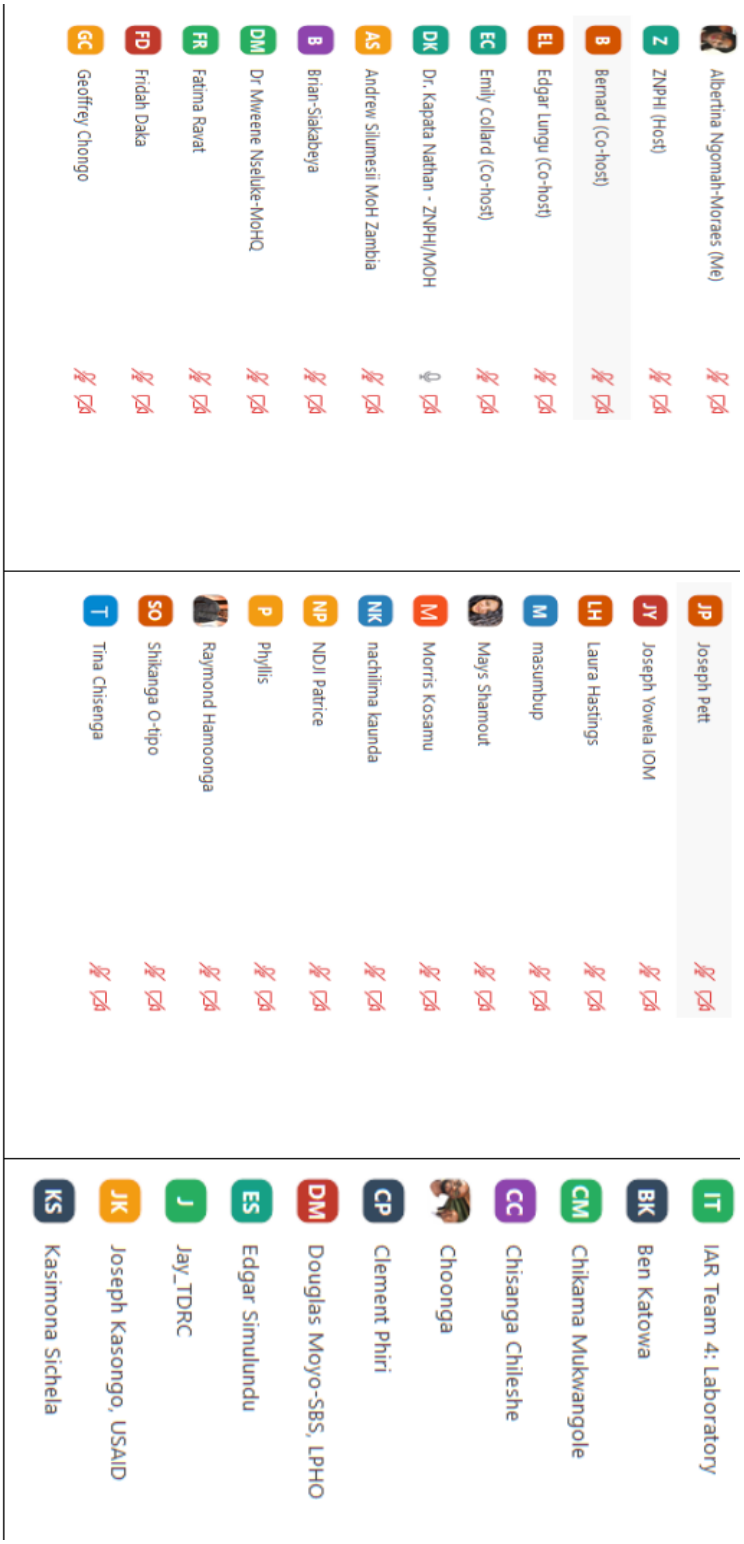
- -Establish an IAR Follow-up Team.
- -Outline the process to document and monitor progress in implementing the IAR recommendations.
- -Engage the senior leadership team throughout the entire process.
- -The follow-up and monitoring of the recommendations and actions identified during the IAR will be conducted on a bi-weekly basis.
- - The result of the follow-up will be communicated to senior management for direction and feedback. Below is the suggested follow-up team.

Follow-up team

Pillars	Team members	Institution/level of operation
Coordination, planning and monitoring	- Dr Kapata - Dr. A. Silumesi - Dr. Kapaya - Dr Hamoonga - Dr. T. Chisenga - Dr. O. Shikanga - Dr. Nyambe Sinyange	- ZNPHI - MoH - ZNPHI - ZNPHI - MoH - WHO - ZNPHI
Risk communication and community engagement	- -Ms. Mazyanga Liwewe - -Ms W. Mulenga - Ms. Albertina Moraes	- -ZNPHI - -MoH - ZNPHI
Surveillance, case investigation and contact tracing	- Dr M. Kapina - Dr N. Kayeyi - Dr. D. Simwaba - Mr. W. Malambo - Ms. P. Kalubula	- ZNPHI - ZNPHI - ZNPHI - CDC - WHO
National laboratory system	- Dr. K. Musonda - Dr. A. Shibemba - Dr. N. Saasa - Dr M. Monze	- ZNPHI - MOH - UNZA VET - UTH
Points of Entry	- Mr. M. Cheelo - Mr. I.Hamuganyu - Ms. C. Mwela	- MOH - MOH - WHO
Case management, knowledge sharing about innovations	- Dr P. Zulu - Dr. Duncan Chanda	- ZNPHI - MOH
Infection prevention Control	- Ms C. Kaziya - Ms C. Mibenge	- MOH - MOH
Operational support and Logistics in management of supply chain and workforce	- Mr.Mpanga Kasonde - Dr K. Musonda - Mr A M Mwanamwenge	- ZNPHI - ZNPHI - WHO

4. ANNEXES

4.1. Annex 1: List of participants and Intra-Action Review (IAR) team




Joseph M Yowela
Jude Akuechiama
Lastone Chitembo
Leigh Tally, CDC
Mangaliso Lawrence Chaula
Marshal Mizanda
Mays Shamout
Moses Mwale
Mutinta Nalubamba
Mwangala Situmbeko
NDJI Patrice
ndumbaid
Nelia Langa
NKayeyi
NKayeyi
Nyambe Sinyange
Patrick Sakubita
Rodgers Mwale-UNICEF ZAMBIA
Sam
Shikanga O-tipo
Thomas Stevens
Waza Bright M'hango
ZNPHI
Invite
Unmute Me
Raise Hand
Katendi Changula
Lastone
mabvuto
Michael Phiri
Miniva
Mpanga
Mutende Mwamba
Mutinta Hamahuwa
Mutinta Nalubamba
Mwelwa Chasaya
Namwaka Mungandi Mulenga
nancy chanda

L Lubinda (Host)	Z Z.. (Host) Ask to Unmute	LH Laura Hastings
T6 Team 6: Logistics managem	FM Francis Mupeta (Co-host)	L Lubinda
A anitaenane	D3 Day 3: Case Management	MI Meg Itoh (CDC Zambia)
CM Chilekwa Mibenge	A anitaenane	MN Mutinta Nalubamba
D Dell	BS Brian Siakabeya	MM Mwaka Monze
GG Genessa Giorgi	CM Carol Mufana	NC Nancy Chanda USAID
GS george sinyangwe	CM Chilekwa Mibenge	NP NDJI Patrice
JS John Simwanza	GG Genessa Giorgi	SM Sarai Malumo
JK Joseph Kasongo	GS george sinyangwe	TS Thomas Stevens
KK Kasamba Kalinda - UNICEF	JS James Simpungwe, CDC	DP Dr Paul Zulu ZNPHI
LC Lastone Chitembo	J jenipher	
	JU Jude UK EMT	
	LC Lastone Chitembo	

LH Laura Hastings	Albertina Ngomah-Mor	George Sinyangwe
MK Mary K. Bwalya	ZNPHI(Host)	Dr. Kapata Nathan - Z
MC MAYENGA, Charly-lorient	Mutinta Nalubamba	Nancy Chanda
NP NDJI Patrice	NDJI Patrice	Thomas Stevens
N ndumbaid	Anitaenane	Lubinda
Raymond Hamoonga	Chilekwa Mibenge	Dr Paul Zulu ZNPHI
SM Sarai Malumo	Laura Hastings	
WB Waza Bright M'hango	Day 3: Case Manageme	
	Sarai Malumo	
	Jude UK EMT	
	Morris Kosamu	
	James Simpungwe, CDC	
	Brian Siakabeya	
	George Sinyangwe	

4.2. Annex 2: Agenda of the Zambia Country COVID-19 Intra-Action Review

- **Day 1: 23rd September 2020**

Time	Activity	Moderator
Team 1: Risk Communication and Community Engagement (Zoom link: https://echo.zoom.us/j/98193125758?pwd=K1hQWVFJT25oWWJjTnVwZkQrb3hTUT09 Password: IAR2020)		
08:30 - 09:00	Registration, introduction, administrative formalities, objectives Facilitator: ZNPHI	ZNPHI
09:00 - 09.20	Inter-Action Review methodology and instructions Facilitator: WHO	
09:20 - 09:45	**Introduction: Response plan and actual timeline of the response** Facilitator: Mrs. Mulenga and Mr. Ngoni Nyambawaro	
09:45 - 10:45	**Session 1 - What worked well? What worked less well? And why?** *Participants work to identify the challenges and best practices of the response.* Facilitator: Mrs. Mulenga and Mr. Ngoni Nyambawaro	
10:45-11:00	Coffee break	
11:00 - 12:00	**Session 1** *(continued)* **- What worked well? What worked less well? And why?** *Participants work to identify the challenges and best practices of the response.* Facilitator: Mrs. Mulenga and Mr. Ngoni Nyambawaro	MoGE
12:00-13:00	**Session 2 - What can we do to improve for next time?** *Participants work to identify what can be done to strengthen the ongoing COVID-19 response.* Facilitator: Mrs. Mulenga and Mr. Ngoni Nyambawaro	
13:00-13:30	**Session 3 – The Way Forward:** *discussion on the best way to implement these activities moving forward.* Facilitator: Mrs. Mulenga and Mr. Ngoni Nyambawaro	
12:30-13:30	**Lunch**	
Team 2: Coordination and Essential Services (Zoom link: https://who.zoom.us/j/99587126621 Meeting ID: 995 8712 6621 Passcode: 4F$*g3S#)		
14:00 - 14:30	Registration, introduction, administrative formalities, objectives Facilitator: MOH	ZNPHI
14:30 - 14.50	Inter-Action Review methodology and instructions Facilitator: WHO	
14:50 - 15:15	**Introduction: Response plan and actual timeline of the response** Facilitator: Dr. Nathan Kapata & CP	
15:15 - 16:15	**Session 1 - What worked well? What worked less well? And why?** *Participants work to identify the challenges and best practices of the response.* Facilitator: Dr. Nathan Kapata & CP	
16:15-16:30	Coffee break	
16:30 - 17:30	**Session 1** *(continued)* **- What worked well? What worked less well? And why?** *Participants work to identify the challenges and best practices of the response.* Facilitator: Dr. Nathan Kapata & CP	DMMU
17:30-18:30	**Session 2 - What can we do to improve for next time?** *Participants work to identify what can be done to strengthen the ongoing COVID-19 response.* Facilitator: Dr. Nathan Kapata & CP	
18:30-19:00	**Session 3 – The Way Forward:** *discussion on the best way to implement these activities moving forward.* Facilitator: Dr. Nathan Kapata & CP	

- **Day 2: 24th September 2020**

Time	Activity	Moderator
Team 3: Surveillance and PoEs (Zoom link: https://echo.zoom.us/j/98193125758?pwd=K1hQWVFJT25oWWJjTnVwZkQrb3hTUT09 Password: IAR2020)		
08:30 - 09:00	Registration, introduction, administrative formalities, objectives Facilitator: ZNPHI	ZNPHI
09:00 - 09.20	Inter-Action Review methodology and instructions Facilitator: WHO	
09:20 - 09:45	**Introduction: Response plan and actual timeline of the response** Facilitator: Muzala Kapina & Precious Kalubula	
09:45 - 10:45	**Session 1 - What worked well? What worked less well? And why?** *Participants work to identify the challenges and best practices of the response.* Facilitator: Muzala Kapina & Precious Kalubula	
10:45-11:00	Coffee break	
11:00 - 12:00	**Session 1** *(continued)* **- What worked well? What worked less well? And why?** *Participants work to identify the challenges and best practices of the response.* Facilitator: Muzala Kapina & Precious Kalubula	Innocent Hamugannyu
12:00-13:00	**Session 2 - What can we do to improve for next time?** *Participants work to identify what can be done to strengthen the ongoing COVID-19 response.* Facilitator: Muzala Kapina & Precious Kalubula	
13:00-13:30	**Session 3 – The Way Forward:** *discussion on the best way to implement these activities moving forward.* Facilitator: Muzala Kapina & Precious Kalubula	
12:30-13:30	**Lunch**	
Team 4: Laboratory Zoom link: https://cdc.zoomgov.com/j/1604029144?pwd=TVBkVWNPaWlkclVIZE9IQjFOYXI6QT09 Meeting ID: 160 402 9144 Passcode: $t4ZY9V!		
14:00 - 14:30	Registration, introduction, administrative formalities, objectives Facilitator:	UTH Virology
14:30 - 14.50	Inter-Action Review methodology and instructions Facilitator:	
14:50 - 15:15	**Introduction: Response plan and actual timeline of the response** Facilitator: Kunda Musonda & Thomas Stevens	
15:15 - 16:15	**Session 1 - What worked well? What worked less well? And why?** *Participants work to identify the challenges and best practices of the response.* Facilitator: Kunda Musonda & Thomas Stevens	
16:15-16:30	Coffee break	

16:30 - 17:30	**Session 1** *(continued)* **- What worked well? What worked less well? And why?** *Participants work to identify the challenges and best practices of the response.* Facilitator: Kunda Musonda & Thomas Stevens	UNZA VET lab
17:30-18:30	**Session 2 - What can we do to improve for next time?** *Participants work to identify what can be done to strengthen the ongoing COVID-19 response.* Facilitator: Kunda Musonda & Thomas Stevens	
18:30-19:00	**Session 3 – The Way Forward:** *discussion on the best way to implement these activities moving forward.* Facilitator: Kunda Musonda & Thomas Stevens	

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- **Day 3: 25th September 2020**

Time	Activity	Moderator
Team 5: Case Management and IPC (Zoom link: https://echo.zoom.us/j/98193125758?pwd=K1hQWVFJT25oWWJjTnVwZkQrb3hTUT09 Password: IAR2020)		
08:30 - 09:00	Registration, introduction, administrative formalities, objectives Facilitator: ZNPHI	UTH
09:00 - 09.20	Inter-Action Review methodology and instructions Facilitator: WHO	
09:20 - 09:45	**Introduction: Response plan and actual timeline of the response** Facilitator: Paul Zulu & Mutinta Nalubamba	
09:45 - 10:45	**Session 1 - What worked well? What worked less well? And why?** *Participants work to identify the challenges and best practices of the response.* Facilitator: Paul Zulu & Mutinta Nalubamba	
10:45-11:00	Coffee break	
11:00 - 12:00	**Session 1** *(continued)* **- What worked well? What worked less well? And why?** *Participants work to identify the challenges and best practices of the response.* Facilitator: Paul Zulu & Mutinta Nalubamba	MOH
12:00-13:00	**Session 2 - What can we do to improve for next time?** *Participants work to identify what can be done to strengthen the ongoing COVID-19 response.* Facilitator: Paul Zulu & Mutinta Nalubamba	
13:00-13:30	**Session 3 – The Way Forward:** *discussion on the best way to implement these activities moving forward.* Facilitator: Paul Zulu & Mutinta Nalubamba	
12:30-13:30	**Lunch**	
Team 6: Logistics management and others Zoom link: https://who.zoom.us/j/91637812664 Meeting ID: 916 3781 2664 Passcode: 9u^cPpT@		
14:00 - 14:30	Registration, introduction, administrative formalities, objectives Facilitator: ZNPHI	MOH
14:30 - 14.50	Inter-Action Review methodology and instructions Facilitator:	
14:50 - 15:15	**Introduction: Response plan and actual timeline of the response** Facilitator: Fred Kapaya & George Sinyangwe	
15:15 - 16:15	**Session 1 - What worked well? What worked less well? And why?** *Participants work to identify the challenges and best practices of the response.* Facilitator: Fred Kapaya & George Sinyangwe	
16:15-16:30	Coffee break	

16:30 - 17:30	**Session 1** *(continued)* **- What worked well? What worked less well? And why?** *Participants work to identify the challenges and best practices of the response.* Facilitator: Fred Kapaya & George Sinyangwe	MSL
17:30-18:30	**Session 2 - What can we do to improve for next time?** *Participants work to identify what can be done to strengthen the ongoing COVID-19 response.* Facilitator: Fred Kapaya & George Sinyangwe	
18:30-19:00	**Session 3 – The Way Forward:** *discussion on the best way to implement these activities moving forward.* Facilitator: Fred Kapaya & George Sinyangwe	