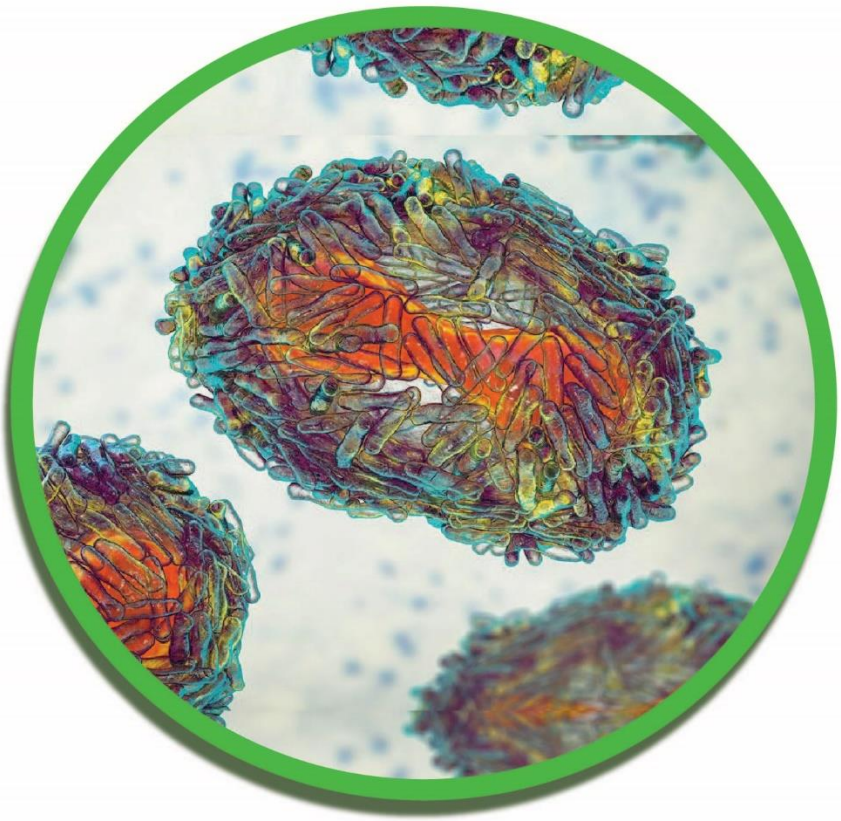
Strategic Preparedness, Readiness and Response Plan

MPOX



KIGALI RWANDA
August 2024

RWANDA BIOMEDICAL CENTRE

rbc Rwanda Biomedical Centre
Healthy People, Wealthy Nation

FOREWORD FROM THE RWANDA BIOMEDICAL CENTRE

Since Mpox (Monkeypox) was first identified in humans in 1970, few people outside of Africa and the public health community had heard of the virus. That changed dramatically in 2022 when a global outbreak occurred. The number of Mpox cases reported to WHO in 2022 surpassed the total number reported in all previous years combined. This outbreak spread around the world, requiring a coordinated global response.

The Strategic Preparedness, Readiness, and Response Plan (SPRP) outlines priority actions needed to stop human-to-human transmission of Mpox, minimize zoonotic transmission, and protect vulnerable groups at risk of severe disease.

With enhanced disease surveillance, laboratory testing, contact tracing, risk communication, and risk reduction measures, this Mpox outbreak can be controlled. In countries without endemic animal reservoirs, like Rwanda, the virus can potentially be eliminated. Vaccination is an important tool but must be part of a comprehensive approach to bring the outbreak to an end.

To change the course of this Mpox outbreak and advance global health security, we must apply lessons learned from the COVID-19 pandemic. The Government of Rwanda is urgently strengthening systems and tools for epidemic and pandemic preparedness and response. Collaboration with stakeholders and partners at all levels will be critical in ensuring a coordinated, efficient, and impactful response.

For these systems and tools to be effective, community engagement is essential. Groups that are disproportionately affected, particularly men who have sex with men and sex workers, face stigma and discrimination in many countries. This undermines prevention and response efforts and may prolong the outbreak by creating barriers to testing and treatment for those most at risk.

Ultimately, to stop Mpox transmission and protect vulnerable groups, the Rwanda Biomedical Centre needs a strong commitment in high-risk districts to implement effective and evidence-based public health measures. These measures should safeguard the dignity and human rights of all individuals and communities.

Prof. Claude Mambo MUVUNYI

Director General

Contents

FOREWORD FROM THE RWANDA BIOMEDICAL CENTRE 2
INTRODUCTION 4
SITUATION OVERVIEW 5
OUTBREAK DETECTION AND GLOBAL EPIDEMIOLOGY 5
Diagnostics, therapeutics and vaccines 6
Mpox cases forecasting compartmental model by introducing vaccination and increased awareness .. 6
Known modes of MPOX virus transmission 7
MPOX SITUATION IN RWANDA AND RISK OF MPOX SPREAD IN RWANDA 7
MPOX RISK ASSESSMENT FOR RWANDA 8
MPOX RESPONSE HEPR CORE COMPONENTS AND STRATEGIC OBJECTIVES 9
GENERAL OBJECTIVE 9
SPECIFIC OBJECTIVES 9
MPOX RESPONSE PILLARS ALIGNED TO THE HEPR COMPONENTS 10
C1| EMERGENCY COORDINATION – KEY PRIORITIES ACTIVITIES 11
Pillar 1: Leadership, coordination, planning, financing, and monitoring 11
C2| COLLABORATIVE SURVEILLANCE – KEY PRIORITIES ACTIVITIES 11
Pillar 2: Surveillance, epidemiological investigation, and contact tracing 11
Pillar 3: Laboratories, diagnostics, and testing 12
C3| COMMUNITY PROTECTION - KEY PRIORITIES ACTIVITIES 12
Pillar 7: Risk communication and community engagement. 12
Pillar 8: Points of Entry 13
C4| SAFE AND SCALABLE CARE - KEY PRIORITIES ACTIVITIES 13
Pillar 4: IPC, WASH, and Safe and dignified burials 13
Pillar 5: Case Management, therapeutics, and care for survivors 14
Pillar 6: Mental health and psychosocial support 14
C5| COUNTERMEASURES AND RESEARCH - KEY PRIORITIES ACTIVITIES 15
Pillar 9: Operational support and logistics 15
Pillar 10: Vaccination 15
Pillar 11: Research and innovation 16
COSTING OF ACTIVITIES PER PILLAR 17

INTRODUCTION

Rwanda, as a country with a high frequency of incoming travelers from different countries worldwide and also neighboring countries with an ongoing Mpox outbreak, recognizes the critical importance of proactive preparedness and response planning. This Strategic Preparedness, Readiness, and Response Plan (SPRP) for Rwanda has been developed to guide our nation's coordinated public health actions in the face of the potential threat posed by Mpox.

The global context of the Mpox outbreak underscores the urgency of our preparedness efforts. On July 23, 2022, the World Health Organization (WHO) declared the escalating Mpox outbreak a Public Health Emergency of International Concern (PHEIC), signaling the highest level of global health alert. As of 30 June 2024, a cumulative total of 99,176 laboratory-confirmed cases of Mpox, including 208 deaths have been reported to WHO from 116 Member States across all six WHO regions, demonstrating the virus's unprecedented spread and geographical reach. While the majority of cases have been reported in newly affected have occurred in sexual networks, the outbreak's potential to affect all demographic groups necessitates a comprehensive and inclusive approach to preparedness and response. Rwanda must be ready to address the needs of all at-risk communities while upholding principles of human rights and dignity.

This SPRP takes into account several critical factors:

- Proximity to countries with ongoing Mpox Outbreak: Given the incoming travelers from highly affected countries and our shared border with the DRC, Rwanda faces an elevated risk of cross-border transmission. This plan outlines specific measures for enhanced surveillance and control at border crossings.
- Vulnerability of specific populations: We recognize that certain groups, including immunocompromised individuals, pregnant women, and young children, may be at higher risk for severe disease. Our plan includes targeted strategies to protect these vulnerable populations.
- Potential for virus adaptation: Uncontrolled transmission increases the risk of viral mutations that could lead to more challenging strains. Our plan emphasizes early detection and rapid response to minimize this risk.
- Ecological concerns: The potential for Mpox to exploit the ecological niche left by smallpox eradication is a consideration in our long-term planning and surveillance strategies.
- Window of opportunity: Rwanda acknowledges the current opportunity to intensify efforts to stop the Mpox outbreak before it becomes entrenched. This plan outlines immediate and sustained actions to seize this opportunity.

The primary focus of Rwanda's SPRP is to ensure our country's readiness to detect and halt any potential Mpox outbreak through effective public health measures. These include:

- Enhanced disease surveillance systems
- Rigorous contact tracing protocols
- Tailored risk communication and community engagement strategies
- Targeted risk-reduction measures, including preparations for potential animal-to-human transmission scenarios

This SPRP has been developed in alignment with WHO guidelines and incorporates input from national and international public health experts. It is designed to be a living document, adaptable to evolving risk assessments and changing circumstances. The plan will be further supplemented by detailed Operational Planning Guidelines and a comprehensive Monitoring and Evaluation Framework.

By implementing this SPRP, Rwanda aims to protect its population, contribute to regional health security, and play its part in the global effort to contain and ultimately stop the spread of Mpox. Our proactive stance and comprehensive planning demonstrate Rwanda's commitment to safeguarding public health in the face of emerging infectious disease threats.

SITUATION OVERVIEW

OUTBREAK DETECTION AND GLOBAL EPIDEMIOLOGY

On 7 May 2022, the World Health Organization (WHO) was informed of a confirmed case of Mpox in an individual who returned to the United Kingdom from Nigeria. This was the tenth documented case of Mpox in a traveler from Nigeria since an outbreak began there in 2017. Shortly after, unrelated clusters of cases, including a family cluster and cases among men who have sex with men, were confirmed in the UK. Portugal also alerted EU member states about cases of an unidentified illness causing rash, later confirmed as Mpox. These events indicated a multi-country outbreak and suggested undetected spread of the virus.

From 1 January 2022 through 30 June 2024, a cumulative total of 99,176 laboratory-confirmed cases of Mpox, including 208 deaths, were reported to WHO from 116 countries/territories/areas (hereafter 'countries') in all six WHO. A total of 934 new lab-confirmed cases were reported in June 2024, including some cases retrospectively reported for previous months. Most cases in June 2024 were reported from the African Region (61%) where the most affected country is DRC which represents 96% of all reported cases in Africa. Then followed by the Region of the Americas (19%) and the European Region (11%). In particular, the African region reported an increase in case counts in June 2024 compared to the previous month (n = 567 vs 465). No case was reported by the Eastern Mediterranean Region.

Mpox is caused by the monkeypox virus(MPXV), which is closely related to the variola virus, which causes smallpox. It can be transmitted from animals to humans (zoonotic), between humans, and from contaminated environments (fomite). Infected individuals often transmit the virus through close physical contact, including sexual contact. There are two known clades of the Mpox virus: Clade I (Congo Basin) and Clade II (West African). Most cases in the 2022 outbreak were linked to Clade II strains. The cause of the outbreak remains under investigation, but the rapid spread suggests undetected human-to-human transmission, possibly augmented by viral adaptation. Research is ongoing to understand these factors. Symptoms of Mpox resemble those of smallpox but are generally less severe. Complications can include secondary bacterial infections, difficulty swallowing or breathing due to enlarged lymph nodes, blindness, scarring, and, in rare cases, encephalitis or sepsis. In the 2022 outbreak, many cases presented with fever, swollen lymph nodes, and rash. About half had lesions in the anogenital area, appearing before systemic symptoms like fever. New clinical symptoms observed included severe inflammation of the urethra (urethritis), rectum (proctitis), severe pain, myocarditis, and encephalitis.

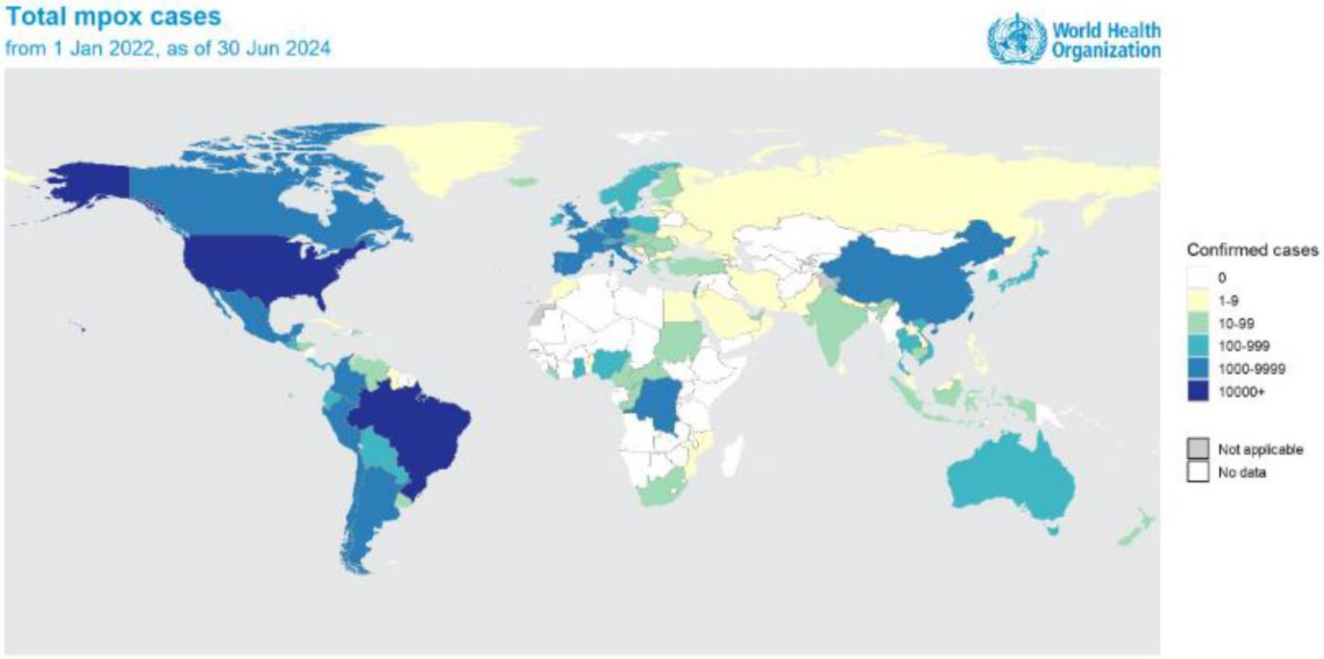


Figure 1. Geographic distribution of confirmed cases of Mpox reported to or identified by WHO from official public sources, from 1 January 2022 to 30 June 2024

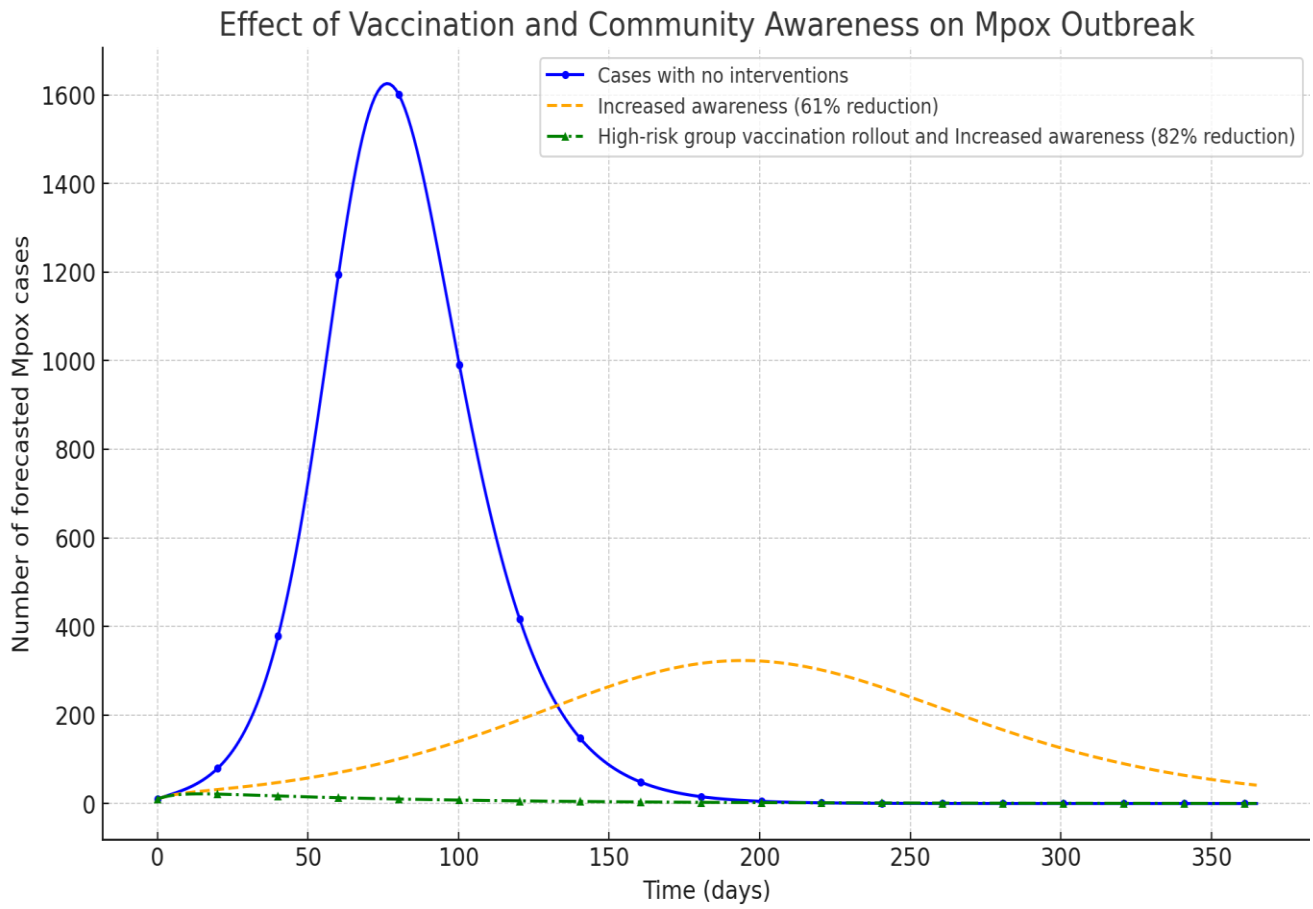
Diagnostics, therapeutics and vaccines

ZThe recommended diagnostic test for Mpox is based on nucleic acid amplification testing (NAAT), using real-time or conventional polymerase chain reaction (PCR). The primary goal of laboratory testing is to enable timely and accurate confirmation of infection to support breaking chains of transmission and stopping the outbreak. WHO has developed interim laboratory testing guidance to facilitate this process.

For the management of symptoms and prevention of complications from Mpox, optimal supportive care is recommended. Two antiviral therapeutics have been approved for the treatment of smallpox. Of these, tecovirimat has also been approved by the European Medicines Agency (EMA) for the treatment of Mpox. A global collaborative clinical trial protocol has been developed to assess the efficacy of tecovirimat in improving clinical outcomes during this Mpox outbreak. Additional clinical studies are currently underway. National authorities are considering three smallpox vaccines for targeted vaccination of individuals at risk of Mpox infection during this outbreak. Of these, the MVA-BN vaccine has been approved in Canada, Europe, and the United States of America, while the LC16 vaccine has been approved in Japan.

WHO currently recommends vaccines for people who have been in close contact with someone who has Mpox, or people who belong to a group at high risk of exposure to Mpox. While JYNNEOS and other Mpox vaccines show promising effectiveness in protecting against infection and severe disease, they are part of a broader strategy including public health measures. Vaccine-induced immunity takes weeks to develop, so continued precautions are advised post-vaccination.

Mpox cases forecasting compartmental model by introducing vaccination and increased awareness



Known modes of MPOX virus transmission

Animal-to-human Transmission

Initial "spillover" from animals to humans (zoonotic transmission) is thought to be the most common trigger for Mpox outbreaks, although the definitive animal reservoir of the Mpox virus has not yet been identified. Various animal species, primarily rodents and non-human primates are known to be susceptible to infection. Animal-to-human transmission may occur through direct inoculation via bites or scratches, or through direct contact with the body fluids or meat of an infected animal during hunting and other activities involving susceptible species.

Human-to-human Transmission

Human-to-human transmission occurs following close contact with an infected and symptomatic individual. This can include face-to-face, skin-to-skin, mouth-to-mouth, and mouth-to-skin contact. Transmission typically involves direct contact with skin lesions or mucocutaneous surfaces and may be amplified during sexual activity. Inhalation of respiratory droplets (and possibly short-range aerosols) may also contribute to infection. People with Mpox are infectious until their rash has completely healed, which typically takes between two and four weeks. The rash, bodily fluids (such as fluid or pus from lesions), and scabs are particularly infectious, as are lesions in the mouth or anus. Individuals who closely interact with an infectious person, including healthcare workers, household members, and sexual partners, are at greater risk of infection. Vertical transmission (mother-to-child) can occur during pregnancy via the placenta or from an infected parent to a child through skin-to-skin contact, skin-to-mouth contact, or inhalation of respiratory droplets. While it is established that close physical contact, including during sexual activity, can lead to transmission, it remains unclear whether transmission through sexual fluids can occur. Research is ongoing to investigate this further.

Contaminated Environments

Transmission of the Mpox virus via contact with contaminated surfaces, objects, or materials (fomites) is possible. This mode of transmission may have played a role in a small number of cases linked to household transmission not associated with sexual contact. Research is ongoing to determine the significance of fomite transmission in the current outbreak.

MPOX SITUATION IN RWANDA AND RISK OF MPOX SPREAD IN RWANDA

In Rwanda, the first two cases of Mpox were reported on July 24, 2024. The first case was a 33-year-old female trader from Bugarama Sector, Rusizi District, who frequently travels to the DRC to sell local goods. She developed symptoms on July 18, 2024, and was detected at a border crossing with the DRC. She was consulted and isolated on July 23, 2024, at Gihundwe Hospital in Rusizi. The sample was collected on July 23, and tested positive for Mpox on July 24, with a CT value of 12.73. The second case was a 34-year-old male from Kimironko Sector, Gasabo District, who also recently traveled to the DRC. He developed symptoms on July 19, 2024, and was detected at Kibagagabaga Hospital on July 23. His sample, collected on July 23, tested positive for Mpox on July 24, with a CT value of 17.05.

Several factors potentially contribute to the spread of Mpox in Rwanda:

1. Population movements to and from Mpox-affected areas
2. Increased tourist traffic
3. Kigali's status as a major regional and international hub for conferences and trade

Based on these factors, Rwanda has been categorized into three Mpox risk levels:

1. High-risk areas:
    a. Districts bordering the Democratic Republic of Congo (DRC) and Burundi where Mpox outbreaks are active
    b. Kigali City, due to its international airport and concentration of female sex workers
    c. Other areas experience significant cross-border movement
2. Moderate-risk areas:
    a. Districts bordering countries without active Mpox outbreaks but with substantial cross-border interactions
3. Low-risk areas:
    a. Districts not bordering any other country

This categorization aims to guide prevention and control efforts across different regions of Rwanda.

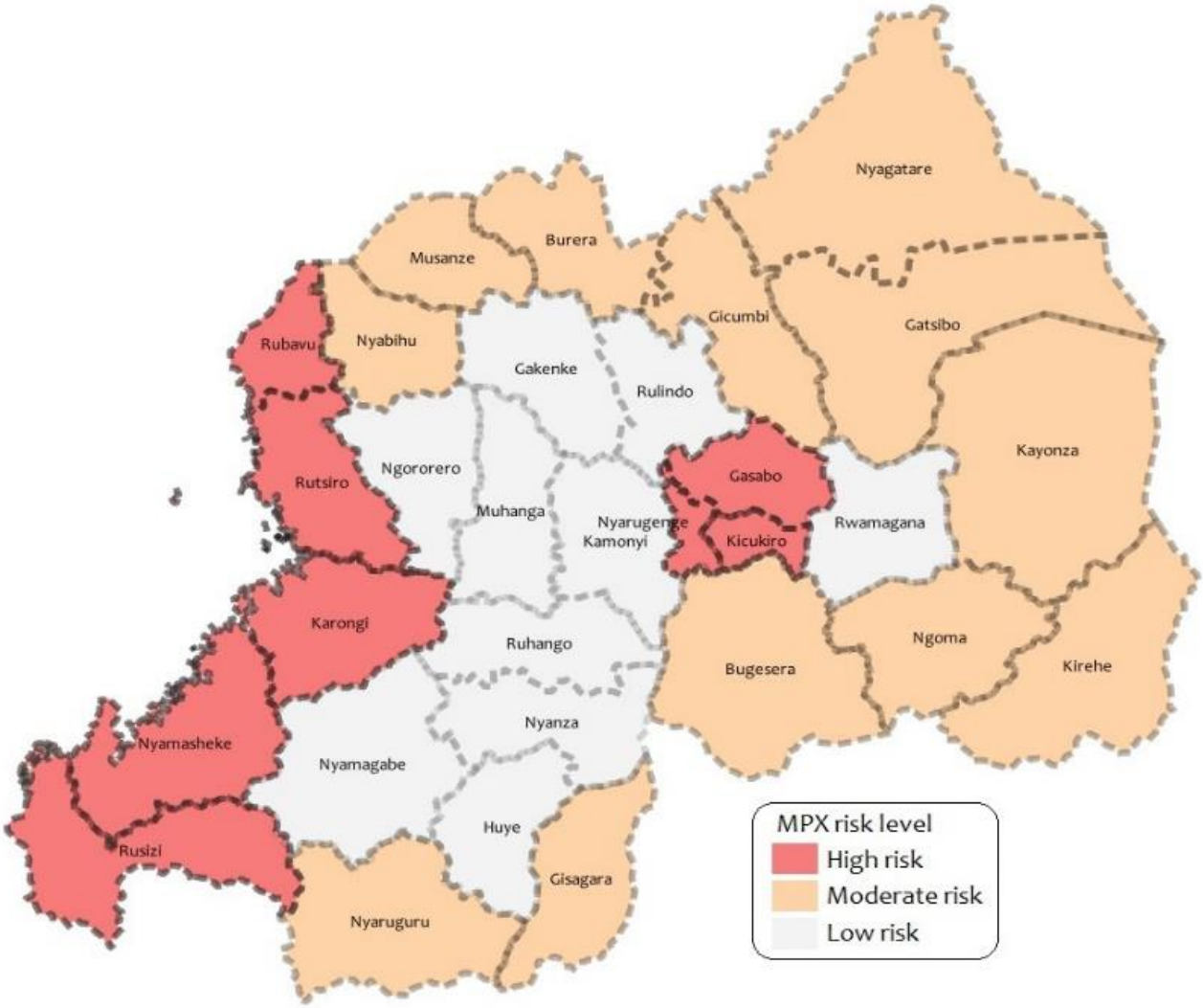
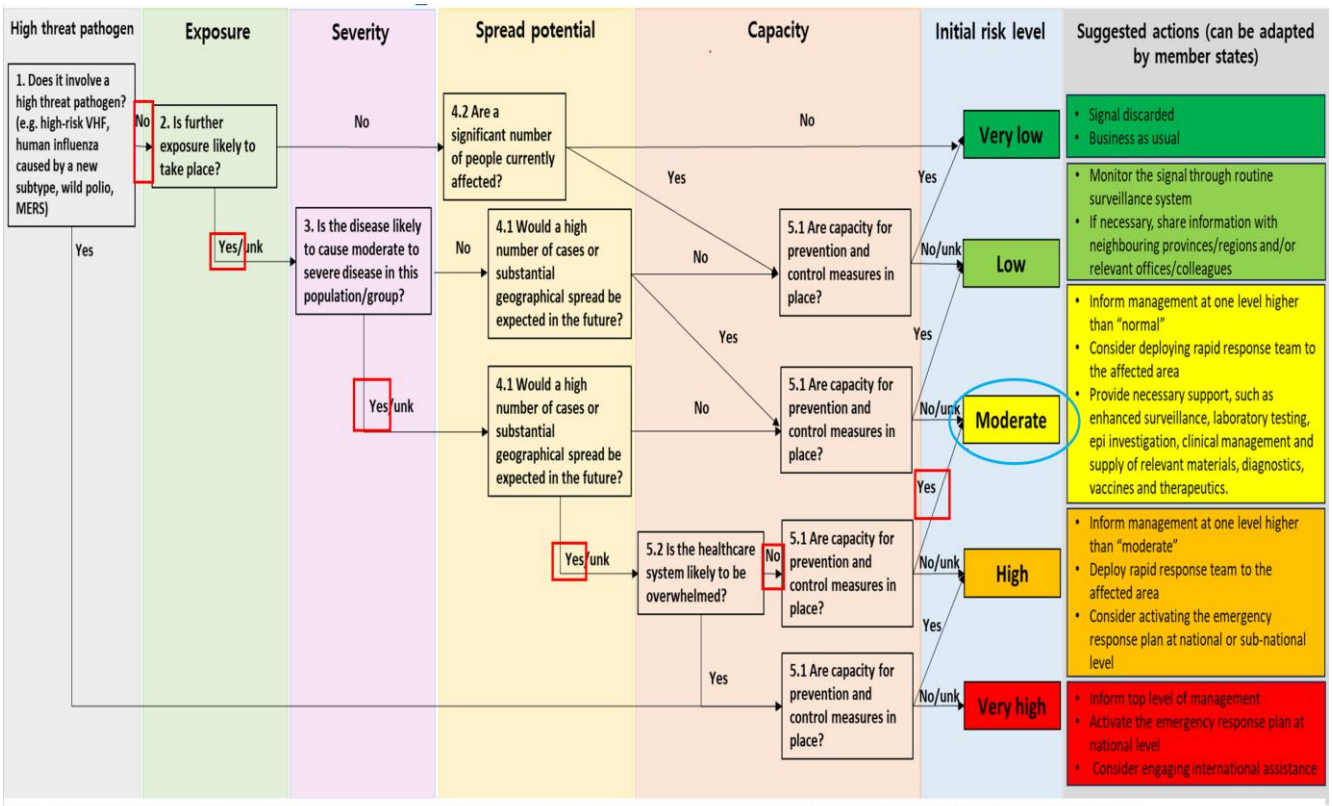


Figure 2. District Map of Rwanda showing priority districts for preparedness plan

MPOX RISK ASSESSMENT FOR RWANDA

The Mpox risk level for Rwanda has been determined to be Moderate. This assessment indicates that while Mpox does not currently pose a severe threat, there are factors warranting attention and preparedness. The moderate risk level suggests that further exposure to Mpox is likely, and the disease could potentially cause moderate to severe illness in the population. Given this assessment, recommended actions include informing management at one level higher than "normal", considering deployment of a rapid response team, and providing necessary support such as enhanced surveillance, laboratory testing, epidemiological investigation, and ensuring adequate supply of relevant materials, diagnostics, vaccines, and therapeutics.



1. If there is a risk of international spread of the event, information should be promptly shared with neighbouring countries and areas. Neighbouring countries are encouraged to assess the risk associated with possible importation of the diseases.
2. If there is high level of public concern or political sensitivities, the event may require higher speed of information release, more intensive risk communication, & more engagement of higher level management.

Figure 3. Algorithm for Rwanda's Mpox risk assessment

MPOX RESPONSE HEPR CORE COMPONENTS AND STRATEGIC OBJECTIVES

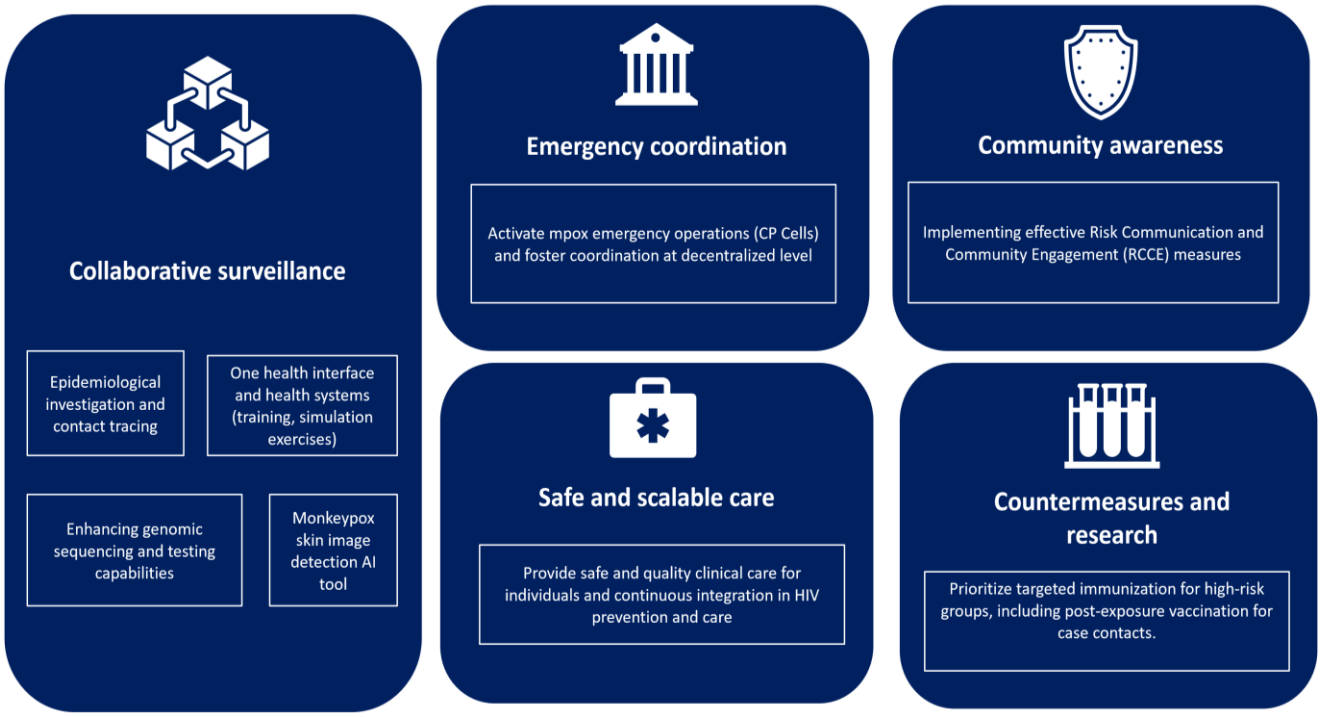
GENERAL OBJECTIVE

To strengthen national and sub-national preparedness and response capacities to achieve and sustain the elimination of human-to-human transmission of Mpox through implementation of evidence-based interventions aligned to the five core components of the WHO Health Emergency Prevention, preparedness, response, and Resilience (HEPR) framework.

SPECIFIC OBJECTIVES

The specific objectives are to strengthen the capacity for preparedness, readiness, and response through:

i. Strengthen capacities for emergency coordination of Mpox preparedness and response at national and sub-national levels that align with the incident management and one-health approach
ii. Strengthen national and sub-national capacities for surveillance, and laboratory testing including genomic sequencing, epidemiological investigation, and contact tracing.
iii. Develop risk communication and community engagement (RCCE) strategies for preventive, risk-reduction, and other social measures.
iv. Support the coordination and effective implementation of appropriate infection prevention and control (IPC) measures and clinical management of Mpox cases.
v. Support medical countermeasures rollout through guidance (strategies), training, and capacity building measures, procurement of vaccines and therapeutics as well as support for integrating vaccines and therapeutics research into the public health response.



MPOX RESPONSE PILLARS ALIGNED TO THE HEPR COMPONENTS

#	HEPR component	Mpox pillar
1	Emergency coordination	**Pillar 1:** Leadership, coordination, planning, financing, and monitoring
2	Collaborative surveillance	**Pillar 2:** Surveillance, epidemiological investigation, and contact tracing **Pillar 3:** Laboratories, diagnostics, and testing
3	Safe and scalable care	**Pillar 4:** IPC, WASH and Safe and dignified burials **Ilar 5:** Case Management, therapeutics, and care for survivors **Pillar 6:** Mental health and psychosocial support
4	Community Protection	**Pillar 7:** Risk communication and community engagement **Pillar 8:** Points of Entry
5	Access to countermeasures, research	**Pillar 9:** Operational support and logistics **Pillar 10:** Vaccination

		Pillar 11: Research and innovation

C1| EMERGENCY COORDINATION – KEY PRIORITIES ACTIVITIES

Strengthen emergency operations and foster coordination within the country and stakeholders for responsive public health and adaptive health services

Pillar 1: Leadership, coordination, planning, financing, and monitoring

Activity	Responsible person	Timeframe
Establish a national Mpox Emergency Operations Center (EOC) with representatives from key ministries and partners.	MoH/RBC	Immediate
Develop and regularly update a national Mpox response plan, including detailed operational plans for each pillar.	RBC/PHS-EPR Division	Immediate
Secure and allocate funding for Mpox response activities, including a contingency fund for rapid response.	RBC/PHS-EPR Division	Weekly
Implement a robust monitoring and evaluation framework to track progress and adjust real-time strategies.	RBC/PHS-EPR Division	Immediate
Develop and maintain partnerships with international organizations for technical and resource support.	RBC/PHS-EPR Division	Immediate
PHEOC support and enhancement to streamline Mpox preparedness, readiness, and response capacities at the subnational level	RBC/PHS-EPR Division	Immediate
Conduct regular stakeholder meetings to ensure alignment and information sharing.	RBC/PHS-EPR Division	Weekly

C2| COLLABORATIVE SURVEILLANCE – KEY PRIORITIES ACTIVITIES

Monitor and share information to improve the collective understanding of how this outbreak is evolving, identify specific risks, and inform response measures

Pillar 2: Surveillance, epidemiological investigation, and contact tracing

Activity	Responsible person	Timeframe
Train healthcare workers at all levels on Mpox case definition, detection, and reporting protocols.	Surveillance unit	Immediate
Conduct intensive training for community health workers on Mpox symptom recognition, reporting, and community engagement.	Surveillance unit	Immediate
Establish a dedicated contact tracing team and develop comprehensive contact tracing protocols.	Surveillance unit	Immediate
Conduct regular epidemiological analyses to identify transmission patterns and hotspots.	Surveillance unit	Immediate
Develop and maintain a centralized Mpox case database with real-time updating capabilities.	Surveillance unit	Immediate
Conduct simulation exercises to test and improve the surveillance and response system.	Surveillance unit	Immediate

Establish a system for zoonotic surveillance in collaboration with animal health sectors.	Surveillance unit	Immediate

Pillar 3: Laboratories, diagnostics, and testing

Activity	Responsible person	Timeframe
Expand PCR testing capacity for Mpox across national and regional laboratories.	RBC/NRL	Aug, 2024
Conduct comprehensive training for laboratory personnel on Mpox sample handling, testing procedures, and biosafety measures.	RBC/NRL	Aug, 2024
Build surge testing capacity for the expanded testing (Recruit and train temporary staff on Mpox testing)	RBC/NRL	Aug, 2024 to Jan, 2025
Procure adequate laboratory testing materials, reagents, and equipment for sustained Mpox testing capacity.	RBC/NRL	Aug, 2024 to Jan, 2025
Conduct regular inventory management to ensure an uninterrupted supply of testing materials.	RBC/NRL	Aug, 2024 to Jan, 2025
Procurement of sample collection materials including appropriate PPE	RBC/NRL	Aug, 2024 to Jan, 2025
Support laboratory Waste management including safe disposal.	RBC/NRL	Aug, 2024 to Jan, 2025
Establishment and review of Mpox testing algorithm including new testing technologies such as PCR using GeneXpert and RDTs when applicable	RBC/NRL	Aug, 2024
Support Mpox sample transportation including packaging materials and training of drivers.	RBC/NRL	Aug, 2024 to Jan, 2025

C3| COMMUNITY PROTECTION - KEY PRIORITIES ACTIVITIES

Delivery of preventive measures and empowerment of communities

Pillar 7: Risk communication and community engagement.

Activity	Responsible person	Timeframe
Develop a comprehensive RCCE strategy for Mpox, tailored to different audience segments.	National	Aug, 2024
ZConduct rapid behavioral insights assessment to identify and address communities' behaviors, attitudes, perceptions and practices that affect disease transmission and prevention efforts (to inform RCCE interventions/strategies)	National and Districts	Aug to Sept, 2024
Engage community leaders, religious figures, and local influencers in Mpox awareness campaigns and as trusted messengers.	National and Implementing Partners	Sept, 2024
Conduct regular knowledge, attitudes, and practices (KAP) surveys to inform and adjust RCCE strategies.	National and Districts	Oct, 2024
Develop, test, validate and disseminate inclusive Mpox education materials in local languages, using various media (print, radio, TV, social media and online media).	National	Aug, 2024
Developing clear communication materials on Mpox vaccination, addressing common concerns and misconceptions, vaccine hesitancy and mitigation strategy.	National	Aug, 2024 to Jan, 2025

Engage community leaders, religious figures, and local influencers in Mpox awareness campaigns and as trusted messengers.	Community	Aug, 2024 to Jan, 2025
Conduct regular community dialogues on Mpox prevention, detection, and control measures.	National and Districts, Village (Community, Churches, Faith based platforms)	Aug, 2024 to Jan, 2025
Establish feedback mechanisms to understand community perceptions and concerns about Mpox and the response efforts.	National and Districts	Oct, 2024 to Jan, 2025
Develop a comprehensive RCCE strategy for Mpox, tailored to different audience segments.	National	Aug, 2024
Conduct rapid behavioral insights assessment to identify and address communities' behaviors, attitudes, perceptions and practices that affect disease transmission and prevention efforts (to inform RCCE interventions/strategies)	National and Districts	Aug to Sept, 2024
Engage community leaders, religious figures, and local influencers in Mpox awareness campaigns and as trusted messengers.	National and Implementing Partners	Sept, 2024

Pillar 8: Points of Entry

Activity	Responsible person	Timeframe
Adapt and update existing SOPs (including health screening protocols) for Mpox to include temperature checks and symptom questionnaires and disseminate to all major PoE	RBC Surveillance unit	Immediate
Develop, deploy and integrate the Mpox skin image detection AI tool at key PoE, ensuring its use complements other screening methods	RBC Surveillance unit	Immediate
Conduct intensive training by trained IDSR FP for border staff on Mpox screening procedures, use of the AI tool, and response protocols	RBC Surveillance unit, OPR unit	Immediate
Establish well-equipped isolations at major points of entry for management of suspected Mpox cases and a functional referral system	Relevant DH,DGIE, Airport Authority	Immediate
Implement robust cross-border collaboration mechanisms for pox surveillance and response, including data sharing protocols	DGIE, IOM,RAC	Immediate
Conduct practical drill at high risk district and simulation exercises at PoE in moderate and low risk districts to test and improve Mpox detection and response procedures	DH, Surveillance unit, OPR unit	Quarterly
Conduct a population mobility mapping (PMM) to inform response activities including surveillance and reporting, screening, referral	RBC Surveillance unit, IOM	Immediate
Develop mechanism to reach mobile population, for specific interventions	RBC Surveillance unit, IOM	Immediate

C4| SAFE AND SCALABLE CARE - KEY PRIORITIES ACTIVITIES

Provide safe and quality clinical care for individuals and prevent infections in health care settings

Pillar 4: IPC, WASH, and Safe and dignified burials

Activity	Responsible person	Timeframe
Develop and disseminate Mpox-specific IPC guidelines for healthcare settings	MOH/RBC	August and September

Conduct comprehensive IPC training for healthcare workers at all levels, focusing on Mpox precautions and proper PPE use.	MOH/RBC/Hospitals	September till December
Ensure adequate supply and strategic stockpiling of PPE and other IPC materials in health facilities.	MOH/RBC/RMS	August till November
Implement enhanced WASH practices in healthcare settings and affected communities, including installation of handwashing stations.	District Authorities	August till January 2025
Develop and train teams on protocols for safe and dignified burials of Mpox victims.	MOH/RBC/RED CROSS	August up to November
Establish IPC monitoring and audit systems in health facilities, with regular assessments and feedback mechanisms.	MOH/RBC	August up to January 2025
Conduct simulation exercises on IPC measures and outbreak response in healthcare settings.	MOH/RBC/Hospitals	August up to January 2025
Implement a system for proper medical waste management, especially for Mpox-contaminated materials.	MOH/RBC/Districts	August up to January 2025
Develop guidelines for home-based IPC measures for mild cases managed outside health facilities.	MOH/RBC	August up to January 2025

Pillar 5: Case Management, therapeutics, and care for survivors

Activity	Responsible person	Timeframe
Develop comprehensive national guidelines and SOPs for Mpox case management, including vulnerable groups and criteria for home-based care vs. facility-based care.	MoH/RBC	August 2024
Conduct intensive training for healthcare workers using one health approach on Mpox clinical care, treatment protocols, patient management and referral.	MoH/RBC, District and Referral Hospitals	September 2024
Integrate and strengthen the capacities of district hospitals in Mpox case management, especially amongst vulnerable groups	MoH/RBC	October 2024
Secure access to medical supplies including supportive care medications and antiviral treatments like tecovirimat for severe cases, and establish clear protocols for their use.	MoH/RBC	October 2024
Implement a robust follow-up system for Mpox survivors, including monitoring for long-term complications.	MoH/RBC	From October 2024 to Jan 2025
Conduct supportive supervisory visits and mentorship to monitor compliance of treatment guidelines at health facility and home-based care.	MoH/RBC	From October 2024 to Jan 2025
Conduct active case identification and reporting	District hospitals & RBC	From August 2024 to Jan 2025
Develop comprehensive national guidelines and SOPs for Mpox case management, including vulnerable groups and criteria for home-based care vs. facility-based care.	MoH/RBC	August 2024

Pillar 6: Mental health and psychosocial support

Activity	Responsible person	Timeframe
Develop /review Mental Health and Psychosocial Support (MHPSS) guidelines incorporating Mpox	MH Division RBC	Aug 2024
Integrate mental health and psychosocial support into Mpox care protocols at all levels of healthcare.	MH Division RBC	Aug 2024

Train healthcare workers and community health workers on providing psychological first aid to Mpox patients and their families.	RBC and District hospitals / HCs	Aug-Sept 2024
Conduct community awareness campaigns to reduce stigma associated with Mpox and promote social inclusion of affected individuals.	RBC and District hospitals / HCs	Aug - Jan 2025
Provide regular mental health assessments and support to Mpox patients, survivors, and their families.	District hospitals/HCs/CHWs	Aug - Jan 2025

C5| COUNTERMEASURES AND RESEARCH - KEY PRIORITIES ACTIVITIES

Improve access to effective medical products for MPOX and drive the cross-cutting research agenda

Pillar 9: Operational support and logistics

Activity	Responsible person	Timeframe
Establish a robust supply chain management system for Mpox-related medical supplies, PPE, and equipment.	MOH/RBC	August up to January 2025
Create and maintain a national stockpile of essential Mpox response materials, with clear inventory management and rotation procedures.	MOH/RBC	August up to January 2025
Develop and test protocols for rapid deployment of resources to Mpox hotspots, including emergency transportation arrangements.	MOH/RBC	August up to January 2025
Implement a real-time logistics tracking system for Mpox-related supplies to prevent stockouts and overstocking.	MOH/RBC	August up to January 2025
Develop contingency plans for supply chain disruptions, including identification of alternative suppliers and transportation routes.	MOH/RBC	August up to January 2025
Conduct regular reviews and optimizations of the supply chain to improve efficiency and responsiveness.	MOH/RBC	August up to January 2025

Pillar 10: Vaccination

Activity	Responsible person	Timeframe
Develop a comprehensive national Mpox deployment and vaccination plan clearly defining priority groups and vaccination phases.	Vaccination Programme	Aug, 2024 - Jan, 2025
Identification of high-risk groups eligible for vaccination/ geo-mapping their locations	Surveillance Unit/PHS and EPR	Aug, 2024 - Jan, 2025
Secure regulatory approval (Mpox vaccines) from Rwanda FDA	Rwanda FDA	Aug, 2024 - Jan, 2025
Forecasting of needed vaccines	Vaccination programme	Aug, 2024 - Jan, 2025
Forecasting of vaccine devices (Syringes)	Vaccination programme	Aug, 2024 - Jan, 2025
Ensure availability of the sufficient storage capacity at all levels	Vaccination programme	Aug, 2024 - Jan, 2025
Ensure timely supply chain management (from ordering to distribution of vaccines to last mile)	Vaccination programme	Aug, 2024 - Jan, 2025
Training of HCPs and establishment of vaccination teams	Vaccination programme	Aug, 2024 - Jan, 2025
Secure access to Emergency use Mpox vaccines through domestic funding, in country DPs and/ or other international partnerships,	RBC	Aug, 2024 - Jan, 2025
Establish and maintain a robust cold chain system for Mpox vaccine storage and distribution, including remote areas.	Vaccination programme	Aug, 2024 - Jan, 2025
Conduct intensive training for healthcare workers on Mpox vaccine administration, storage handling, and adverse event monitoring.	Rwanda FDA	Aug, 2024 - Jan, 2025

Conduct active post-vaccination surveillance for adverse events following immunization (AEFI).	Vaccination programme	Aug, 2024 - Jan, 2025
Establish mobile vaccination teams for reaching remote or high-risk populations.	Vaccination Programme	Aug, 2024 - Jan, 2025

Pillar 11: Research and innovation

Activity	Responsible person	Timeframe
Establish a national Mpox research agenda, aligned with WHO research priorities but tailored to the Rwandan context.	MoH/RBC	Aug, 2024 - Jan, 2025
Conduct in-depth studies on Mpox transmission dynamics in Rwanda, including potential animal reservoirs and human behaviors.	MoH/RBC/RAB	Aug, 2024 - Jan, 2025
Enhance local capacity for Mpox-related laboratory research, including training programs and equipment upgrades.	MoH/RBC	Aug, 2024 - Jan, 2025
Conduct social science research to understand community perceptions, behaviors, and barriers related to Mpox prevention and control.	MoH/RBC	Aug, 2024 - Jan, 2025

COSTING OF ACTIVITIES PER PILLAR

PILLAR	OBJECTIVE	ACTIVITY	SUB-ACTIVITIES	IMPLEMENTATION LEVEL	COSTING ASSUMPTIONS	QUANTITY	UNIT COST	FREQUENCY	TOTAL COST (RWF)	TOTAL COST (USD)	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25
Surveillance, epidemiological investigation, and contact tracing	Promptly detect, monitor, timely investigate, and inform response measures to prevent futher transmission of Mpox in Rwanda	Develop Mpox case definitions, tools, SOPs and training aids	Conduct a 5-day workshop to develop Mpox case definitions, tools, SOPs and training aids		- Meeting in Kigali - Conference package is required for 30 participants	30	65,000	5	9,750,000	7,500						
			Design and print the developed Mpox tools (case investigation, contact listing and follow up forms) and SOPs	National	Rwf 3m/district	30	3,000,000	1	90,000,000	69,231						
			Distribute the developed Mpox tools and SOPs	National	Rwf 100,000/district	30	100,000	1	3,000,000	2,308						
		Train rapid response teams on case investigation, active case search, contact tracing and follow up	National level TOT surveillance and Case &Contact Tracing App training	National	- Training in Bugesera - Conference package for 40 participants & 5 facilitators @ 27,000 per day, DSA @55,000 per day and transport @5,000 (one way) for 45 participants	45	84,000	5	18,900,000	14,538						
			Priority/high risk districts Training. Surveillance and Case &Contact Tracing App training	District	- Training in Musanze of 8 high risk districts for 5 days 10 participants/district - 3 cluster training of 27 participants/cluster and 5 facilitators - Conference package for 45 participants @ 27,000 per day - DSA @55,000 per day and transport @10,000 (one way) for 95 participants	95	86,000	Z 5	40,850,000	31,423						

			Moderate risk districts training	District	- 4 cluster training in 12 moderate risk districts for 5days - 10 participants/district - 30 partcipants/cluster and 5 facilitators - Conference package for 140 participants @ 27,000 per day - DSA @55,000 per day and transport @10,000 (one way) for 140 participants	140	86,000	5	60,200,000	46,308						
			Low risk districts training	District	- 3 cluster training in 10 low risk districts for 5days, 10 participants/district - 33 partcipants/cluster and 5 facilitators - Conference package for 115 participants @ 27,000 per day - DSA @55,000 per day and transport @10,000 (one way) for 115 participants	115	86,000	5	49,450,000	38,038						

		Train healthcare workers at all levels on Mpox case definition, detection, and reporting protocols	Train healthcare workers at all levels on Mpox case definition, detection, and reporting protocols	District	- One day training for 100 HCWs per district @4 persons per facility (Nurse/IDSR focal person, Community Environmental Health Officer, data manager, Lab) and 5 facilitators (district RRT) from the district - HCWs from health centers will be trained at the District hospital @ RWF20,000 for lunch and transport for 100 participants - 100 participants per district x 30 districts = 3000	3000	20,000	1	60,000,000	46,154							
					- One person from the Provincial PHEOC to support the health center level training for 4 days @Rwf 55,000 - Hiring of vehicle @Rwf 160,000 per day for 4days - 1 Provincial PHEOC per district x 30 districts = 30	30	215,000	4	25,800,000	19,846							
		Train community health workers on Mpox symptom recognition and reportingA	Training of CHWs in communities in the 8 Priority/high risk districts	Community	- One day training for 16,000 CHWs - Training will be conducted in their respective health centers by the trained CEHO - Allowance of @ RWF3,000 per day for 16,000 participants	16000	3,000	1	48,000,000	36,923							

			Training of CHWs in communities in the 12 moderate risk districts		- One day training for 24,000 CHWs - Training will be conducted in their respective health centers by the trained CEHO - Allowance of @ RWF3,000 per day for 24,000 participants	24000	3,000	1	72,000,000	55,385							
			Training of CHWs in communities in the 10 low risk districts		- One day training for 20,000 CHWs - Training will be conducted in their respective health centers by the trained CEHO - Allowance of @ RWF3,000 per day for 20,000 participants	20000	3,000	1	60,000,000	46,154							
		Conduct regular epidemiological analyses to identify transmission patterns and hotspots	Conduct regular epidemiological analyses to identify transmission patterns and hotspots	National	- Identify a dedicated focal person for this activity - Daily/weekly epidemiological analyses of surveillance data	0	-	-	-	-							
		Develop and disseminate timely situation reports to stakeholders and partners consistently	Develop and disseminate timely situation reports to stakeholders and partners consistently	National	- Identify a dedicated focal person for this activity - Daily/weekly developmemt and dissemination of situation reports to stakeholders and partners	0	-	-	-	-							
		Develop and maintain a centralized Mpox case and contact tracing database with real-time updating capabilities	1. Setup an online patient follow up systems/app 2. Maintennace of system	National	Creating ans setting up the case and contact tracing app	1	75,010,000	1	75,010,000	57,700							
			Link the newly developed app to the existing surveillance database	National	Link the newly developed app to the existing surveillance database	0	-	-	-	-							

			Piloting to test and improve the surveillance and response system. in districts marked for readiness activities	District	Piloting at Kigali and Bugasera 2day piloting for two people @Rwf 55,000 per person x 2days transportation = Rwf 10,000 per person	2	65,000	2	260,000	200						
		Enhance Mpox surveillance in wildlife in collaboration with animal health sectors	Develop Wildlife Mpox case definitions, tools, SOPs and training aids	National Park	Conference package @65000 for 6 participants for 5days & 2 facilitators @ 27,000 per day DSA @55,000 per day and transport @10,000 for 30 participants .	5	157,000	30	23,550,000	18,115						
			Wildlife TOT surveillance training	National level	Conference package @65000 for 6 participants for 5days & 2 facilitators @ 27,000 per day DSA @55,000 per day and transport @10,000 for 6 participants .	5	157,000	6	4,710,000	3,623						
			Train wildlife vets at protected area levels on Mpox case definition, detection, and reporting protocols	National Park	Training in Musanze of 20 wildlife Vets for 5days 4 participants/national parks Conference package @65000 for 20 participants @ 27,000 per day DSA @55,000 per day and transport @10,000 (one way) for 20 participants	5	157,000	20	15,700,000	12,077						

			Train park staff on Mpox symptom recognition, and reporting	National Park	Two days training for 50 Park staffs per day Training will be conducted in their respective National Parks Allowance of @ RWF3,000 per day for 50 participants and DSA @55,000 and transport @10,000 for facilitators	2	68,000	50	15,700,000	12,077						
			Random sampling and testing wildlife reservoir species for any potential Mpox Pathogens around areas of interface	National Park	Hiring of vehicle @Rwf 160,000 per day for 20days Purcase of field equipments for sampling, Laboratory reagents and kits for testing	1	8,000,000	1	8,000,000	6,154						
			Ensure availability of adequate PPE at all National parks	National Parks	Purchase of field PPEs for all teams at Park level	1	5,000,000	1	5,000,000	3,846						
SUBTOTAL									685,880,000	527,600						
Laboratories, diagnostics, and testing	Strengthen national and sub-national testing capacities for timely laboratory investigation and epidemiosurveillance, including screening, genotyping and sequencing.	Expand PCR testing capacity for Mpox across national and regional laboratories.	Awareness workshop for establishing testing algorithm, case identification measures, laboratory SOPs.	National Reference Laboratory, Rwanda Military Referral and Teaching Hospital, Gisenyi DH, Gihundwe DH, Ruhengeri L2TH, Nyagatare DH, Kibungo L2TH.	40 participants including per diem, transport, accomodations and hotel logistics	40	75000	5 days	15,000,000	11,538						
				Central level and all Hospitals	One participant will cost 75,000 Rwf per day	110 participants	75000	4	33,000,000	25,385						
				Central level and all Hospitals	One participants will cost 75,000 per day	440 Participants	75000	3	99,000,000	76,154						
			Recruitment of temporary staff for 6 months phase one	7 Hubs	To recruit 12 staff for NRL and 4 for each Hub in total will be 40staff	40 staff	950000	6	228,000,000	175,385						

				7 hubs	To train 38 new recruted staff	44 (38 trainees +6 trainers)	75000	10	33,000,000	25,385							
				Procure for 7 hubs & NRL	70 kits to be used in 7 hubs & NRL	7 hubs & NRL	903500	3/week	63,245,000	48,650							
				Procure for 7 hubs & NRL	14 kits to be used in 7 hubs & NRL	7 hubs & NRL	1560000	2/month	21,840,000	16,800							
			Procurement of 70 detection kits	Procure for 7 hubs & NRL	70 kits to be used in 7 hubs & NRL	7 hubs & NRL	1820000	1/month	127,400,000	98,000							
						NRL	11656450	N/A	69,938,700	53,799							
			Procurement of sequencing kits	Procure for NRL	60 in 1 month	NRL	19207066	3 runs per month	115,242,200	88,648							
				Procure for NRL		NRL	5992133	2/month	35,952,800	27,656							
										-							
			Procurement of sample collection materials	Procure for all HFs	9000 VTMs & Swabs in 6 months	All HFs	705	1500/ month	6,345,000	4,881							
			Procurement of PPE	Procure for all HFs	252,000 PPE sets in 6 months	All HFs	6000	42,000/month	1,512,000,000	1,163,077							
			Procure biohazard bags	Procure for 8 hubs	4 pieces per Hub per day	8 Hubs	1000	4 pieces per Hub per day	5,760,000	4,431							
				NRL, RMRTH, Gihundwe DH, Gisenyi DH, RUHENGERI L2TH, Nyagatare DH, Kibungo L2TH	40 participants including per diem, transport, and accomodation and hotel facility	40	75000	5 days	15,000,000	11,538								
				All 57 Hospitals	2736 trips in 6 months	All HFs	62000	2 trips per week	169,632,000	130,486							
SUBTOTAL									2,550,355,700	1,961,812							
IPC, WASH, and Safe and dignified burials	To contain MPOX infection by minimizing virus transmission within individuals, healthcare settings, and the community.	Develop and disseminate Mpox-specific IPC guidelines for healthcare settings	Conduct a 5 day workshop to develop IPC/WASH/SDB guidelines and SOPs for healthcare settings			40	84900	5	16,980,000	13,062							
						40	55000	1	2,200,000	1,692							
						0	-	1	-	-							
			Conduct the training of trainers (TOT) 2 Persons per hospital (IPC Focal Point and EHO), 1 District in-Charge of Hygiene and WASH at District level, refugee camps = 175			40	84900	15	50,940,000	39,185							
						40	-	657	-	-							
						60	8000	972	466,560,000	358,892							
						35	8000	26	7,280,000	5,600							

			Participants countrywide (5 workshop of 35 participants), 3 days per workshop														
			Conduct inventory of PPE, disinfectants, detergents, etc/refer to the Checkist of IPC supplies/PPE			30	-	1	-	-							
						1	195000000	1	195,000,000	150,000							
			Stockpiling of IPC supplies/PPE at the strategic areas			0	-	-	-	-							
						30	-	1	-	-							
						1	65000000	1	65,000,000	50,000							
			Water supply to the handwashing stations without access			1	39000000	1	39,000,000	30,000							
			Procurement of soap for handwashing practices POEs, HCFs, public places, schools			1	65000000	1	65,000,000	50,000							
			Conduct refresher training of SDB teams (30 teams), a 3 day training workshop (theory and simex)			20	84900	120	203,760,000	156,738							
						30	-	1	-	-							
						30	650000	1	19,500,000	15,000							
		Establish IPC monitoring and audit systems in health facilities, with regular assessments and feedback mechanisms.	Develop an IPC rapid assement tool/KoboCollect (through a consultant)			1	1000000	5	5,000,000	3,846							
						40	84900	4	13,584,000	10,449							
						40	11000	62	27,280,000	20,985							
			Develop IPC/WASH simulation exercises guideline and SIMEX evaluation tool (trough TWG)			1	-	1	-	-							
						56	500000	1	28,000,000	21,538							
						35	69000	12	28,980,000	22,292							
						35	69000	15	36,225,000	27,865							
			Training HCFs cleaners(hospitals, health centers, health posts) on MPOX waste management and environmental decontamination (HCF-based training)			5000	-	2	-	-							
						1	-	1	-	-							
			Organize a one day validation workshop of MPOX home-based care IPC guideline			40	84900	1	3,396,000	2,612							
						40	8000	87	27,840,000	21,415							
SUBTOTAL									1,301,525,000	1,001,173							
Case Management, therapeutics, and care for survivors	Strengthen the national health systems capacity to prevent the spread of the disease while providing improved optimal care to Mpox	Develop comprehensive national guidelines and SOPs for Mpox case management, including vulnerable groups and criteria for home-based care	Establish a technical working group	RBC	The technical working group will be created by RBC staff and communicated to each individual/ stakeholder via email - This is a no cost activity				-								

	cases and reduce mortality	vs. facility-based care.															
				Technical working group	5days workshop for 30 consultants from different specialities, full conference hotel package, allowances and accomodation for 30 people	30	4500000	5	22,500,000	17,308							
				RBC and relevant stakeholders	3days workshop of 20 individuals from different specialities, full hotel conference package, allowances and accomodation	30	4500000	3	13,500,000	10,385							
			Conduct a one day dissemination meeting of the validated national guidelines for Mpox case management	MoH and RBC	1 day virtual presentation and dissemination meeting of the national guidelines to all 50 director generals of DH and referal hospitals - This is a no cost activity				-	-							
			Distribution of the national guidelines for Mpox case management	MoH and RBC	Printing 1000 copies of the national guidelines for Mpox (50 pages per copy) at Rwf 5,000 per copy and distribution to Health Centers, District Hospitals, Referral Hospitals and Private clinics : Rwf 5M for distribution	1500	30000000	1	30,000,000	23,077							
		Conduct intensive training for healthcare workers using one health approach on Mpox clinical care, treatment protocols, patient management and referral.	Conduct 1 day TOT workshop on Mpox clinical care, treatment protocols, and patient management including people with cormobidities	MoH and RBC	60 clinical staffs (42 from district hospitals, 6 from refugee camps, 6 from referal hospital and 6 from private clinics) 20 clinicians per day for 3days + 2trainers per site Full Hotel Conference package :per person: Rwf 38,000 Transport per trainee: Rwf 20,000 Allowance per	66	6060000	1	6,060,000	4,662							

					tranee: Rwf 38,000 Allowance per trainer: 50,000												
			Conduct 2 days cascade training of healthcare providers on Mpox clinical care, treatment protocols, and patient management including people with cormobidities	District Level	30 clinicians at each district including staff from health posts, health centers, private clinics and trainer Allowance of Rwf 20,000 per clinicians including tickets	900	18000000	2	36,000,000	27,692							
			Conduct a 1 day training workshop of veterinary doctors and environmental specialist on Mpox infection, prevention and Control using one health approach	RBC and RDB	10 veterinary doctors + 10 environmental specialist Allowance per person : Rwf 48,000 per persol full hotel conference package:Rwf 38,000 per person	20	860000	1	860,000	662							
			Conduct 1 day training of community health workers at peripheral/health center levels on Mpox case identification, IPC, home-based care protocol and referal	District Level	sample of 30 CHWs per district, representing every catchment area Allowance of Rwf 20,000 per clinicians including tickets	900	18000000	1	18,000,000	13,846							
		Integrate and strengthen the capacities of district hospitals in Mpox case management especially amongst vulnerable groups	Conduct capacity assessment of the health facilities for efficient management of Mpox cases especially people with cormobidities	MoH and RBC	Assessment excercise will be done by Provential RBC PHEM focal+ 1MEAL, 5 days, operational cost(Travel,perdiem and accomodation	4	200000	5	Z 4,000,000	3,077							
				MoH and RBC	An estimate of 15 District hospitals w/o equipped isolation	15	8000000	1	120,000,000	92,308							
		Secure access to medical supplies including supportive care medications and antiviral treatments like tecovirimat for severe cases, and establish clear protocols for their use.		MoH and Partners	This is a no cost activity					-							

			Work with RMS to distribute all the required medical supplies in health facilities	MoH	Distribution of Tecoviramat and other related medical supplies to high risk areas and referrals	5	5000000	1	5,000,000	3,846						
		Implement a robust follow-up system for Mpox survivors, including monitoring for long-term complications.	Adapt WHO case report form for Mpox to capture Mpox confirmed, Mpox survivor cases and the next Rendez-vous	RBC	This is a no cost activity,					-						
			Institute monthly follow up mechanism in HMIS for 3 consective months especially for vulnerable groups	MoH and RBC	This is a no cost activity,					-						
		Conduct supportive supervisory visit and mentorship to monitor compliance of treatment guidelines at health facility and home-based care		RBC	This is a no cost activity,					-						
				MOH	10 supervisors for 5 days at 100,000Rwf per day inclusive of Travel, perdiem and accomodation	10	1000000	5	5,000,000	3,846						
			Conduct mentorship visits to healthcare providers, CHWs to high risk districts to monitor compliance to treatment guidelines and home-based care	MoH and RBC	10 Physicians, for 5 days at 150,000Rwf per day inclusive of Travel, perdiem and accomodation	10	1500000	5	7,500,000	5,769						
		Conduct active case identification and reporting		District Hospitals and RBC	Intergrate in the routine activity - This is a no cost activity				-	-						
				RBC and Partners	Consultation and intergration fee	1	5000000	1	5,000,000	3,846						
SUBTOTAL									273,420,000	210,323						
Mental health and psychosocial support	To provide Mental Health and Psychosocial Support (MHPSS) to Mpox cases, survivors, their families and communties	Develop/Review Mental Health and Psychosocial Support (MHPSS) guidelines incorporating Mpox	Workshop to review and integrate the MHPSS component into the existing guidelines, develop SOPs and training materials	National	2 day workshop for 15 people in Kigali, 5 will require overnight stay for 3 days, the conference package will be for all 15 participants (conference package)	15	30000	2	900,000	692						
					Transport for all	15	10000	2	300,000	433						
					Perdiem for 5 particpants coming	5	38000	3	570,000	1,315						

					from districts out of Kigali												
		Integrate MHPSS into Mpox care protocols at all levels of healthcare.			This will be done during the MHPSS workshop above and will not require separate ressources				-	-							
		Train healthcare workers and community health workers on providing psychological first aid to Mpox patients and their families.	Conduct 1 national TOT	National	Conference package for 5 trainers,20 particpants ,2days workshop outside Kigali	25	30000	2	1,500,000	1,154							
			Conduct 1 national TOT	National	Perdiem for the 25 particpants	25	38000	3	2,850,000	2,192							
			Conduct 1 national TOT	National	Transport for particpants	20	10000	1	200,000	154							
			Conduct 1 national TOT	National	Vehicle for trainers	2	150000	3	900,000	692							
			Conduct training in 12 high risk districts at hospital level	District	Meals for 2 mental health providers per facilty from 12 DHs, conducted by 1 TOT per facility	24	6000	1	144,000	111							
			Conduct on-site training in 12 high risk districts at hospital level	District	Perdiem for TOT	12	38000	1	456,000	351							
				District	Printing of training materials	24	5000	1	120,000	92							
				District	Transport for 3 HC staff (Titulaire,CHEO,nurse) from 128 Hcs	384	10000	1	3,840,000	2,954							
			Conduct 1 day training of health centers in the 12 high risk districts	District	Meals for the 3 HC staff and for 2 trainers	640	6000	1	3,840,000	2,954							
			Conduct training of Community Health Workers on MHPSS in the 12 high risk district hospitals	Community	Meals for CHWs ,one day training	14762	5000	1	73,810,000	56,777							
				Community	Meals for 2 heath center based trainers from the 128 HCs loacted at 12 high risk district hospitals	256	6000	1	1,536,000	1,182							
				District	Perdiem for 5 day supervision for 1 supervisor per district every 2 months (3 times)	12	38000	15	6,840,000	5,262							
				District	Vehicle for supervisors	12	150000	15	27,000,000	20,769							

			Conduct on-site training in 16 moderate risk districts at hospital level	District	Perdiem for TOT	16	38000	1	608,000	468							
				District	Printing of training materials	16	5000	2	160,000	123							
				District	Transport for 3 HC staff (Titulaire,CHEO,nurse) from 212 Hcs	636	10000	1	6,360,000	4,892							
			Conduct 1 day training of health centers in the moderate risk districts	District	Meals for the 3 HC staff and for 2 trainers from 16 DH	668	6000	1	4,008,000	3,083							
				Community	Meals for CHWs ,one day training	25610	5000	1	128,050,000	98,500							
					Meals for 2 heath center based trainers from the 212 HCs loacted at 1 6 moderate district hospitals	424	6000	1	2,544,000	1,957							
			Conduct Support supervion and mentorship visits to 212 HCs and 16 DHs Trained Facilities	District	Perdiem for 5 day supervision for 1 supervisor per district every 2 months (3 times)	16	38000	15	9,120,000	7,015							
					Vehicle for supervisors	16	150000	15									
			Conduct on-site training in 15 low risk district hospital	District	Meals for 2 mental health providers per facilty from 15 DHs, conducted by 1 TOT per facility	30	6000	1	180,000	138							
			Conduct training in 15 low risk district hospitals at hospital level	District	Per diem for TOT	15	38000	2	1,140,000	877							
			Conduct on-site training in 15 low risk districts at hospital level	District	Printing of training materials	30	5000	1	150,000	115							
			Conduct 1 day training of health centers in the 15 low risk districts	District	Transport for 3 HC staff (Titulaire,CHEO,nurse) from 170 Hcs	510	10000	1	5,100,000	3,923							
			Conduct 1 day training of health centers in the 15 low risk districts	District	Meals for the 3 HC staff and for 2 trainers	75	6000	1	450,000	346							
				Community	Meals for CHWs ,one day training	18374	5000	1	91,870,000	70,669							

				Community	Meals for 2 heath center based trainers from the 170 HCs loacted at 15 low risk district hospitals	340	6000	1	2,040,000	1,569							
			Conduct Support supervion and mentorship visits to 170 HCs and 15 DHs Trained Facilities	District	Perdiem for 5 day supervision for 1 supervisor per district hospitals (15) every 2 months (3 times)	15	38000	15	8,550,000	6,577							
					Vehicle for supervisors	15	150000	15	33,750,000	25,962							
			Printing and dissemination of job aid on MHPSS	National	5 job aids for all hospitals (43),5 job aids per health center(510),1 job aid per CHWs(18374)	61511	2000	1	123,022,000	94,632							
		Conduct community awareness campaigns to reduce stigma associated with Mpox and promote social inclusion of affected individuals.		Community	This is budgeted under the RCCE pillar				-	-							
				Community	Transport for nurse visiting affected individuals (100 individuals)	100	10000	1	1,000,000	769							
				Community	Meals for nurse visiting affected individuals (estimate of 100 individuals)	100	6000	1	600,000	462							
		Provide regular mental health assessments and support to Mpox patients, survivors, and their families.		District	No cost associated												
				Community	No cost associated												
		Implement a peer support system for healthcare workers to prevent burnout and promote resilience.	Provide MHPSS screening and support for responders across all pillars	District	No cost associated												
		Implement a longitudinal monitoring system for Mpox survivors in collaboration with the Research pillar and provide long		District													

		term MHPSS, characterize and address sequalae (complications)															
				District	This will be budgeted under Research and Inovation pillar												
SUBTOTAL										543,508,000	419,163						
Risk communication and community engagement		Develop a comprehensive RCCE strategy for Mpox, tailored to different audience segments.		National	This is a no cost Activity					0							
			Develop ToRs for hiring a consultant	National	For RCCE interventions from onset, prefer a behavioral insights rapid assessment for Mpox to obtain timely, in-depth, actionable data on specific behaviors and drivers including psychological influencing MPOX transmission, allowing for real-time adaptation of interventions, whereas a KAP survey is slower and less responsive to the dynamic nature of an outbreak- This is a no cost activity	1				0							
			Advertise the consultancy position, review applications to select the most qualified applicant	National	This is a no cost Activity	1				0							
		Conduct rapid behavioural insights assessment to identify and address communities behaviors, attitudes, perceptions and practices that affect disease transmission and prevention efforts (to inform RCCE interventions/strategies)	Finalize the contract of the selected consultant and formalize his/her engagement.		all associted costs will be under the consultant's contract	1			45500000	35000							
	To increase public awareness and understanding of Mpox, its symptoms, prevention measures, and available treatments, particularly in high-risk areas.		Completion of inception and desk review reports and commencement of data collection on field	Districts	This is a no cost Activity	1	N/A	N/A		0							
			Final report with clear findings and actionable recommendations validated, approved and used to inform RCCE interventions for Mpox	National						0							
		Conduct regular knowledge, attitudes, and practices (KAP) surveys to inform and	Develop ToRs for hiring a consultant	National and Implementing Partners	$385/day	30	385	1	15477000	11550							

		adjust RCCE strategies. Laurence	Workshop to training of CHWs to report on the new codes	National and Implementing Partners	$61/day/participant	610	61	3	149584200	111630							
			Workshop to design, develop a tool for CHWs and corresponding codes to use in eCBS	National and Implementing Partners	$61/day/participant	20	61	5	8174000	6100							
			Mentorship and Supervison to CHWs on feedback and use of eCBS	National and Implementing Partners	$157/day/participant	20	157	20	84152000	62800							
			Data collection and analysis	National and Implementing Partners					0	0							
			Workshop to montly dissemination of the findings	National and Implementing Partners	$61/day/participant	45	61	5	18391500	13725							
		Develop, test, validate and disseminate inclusive Mpox education materials in local languages, using various media (print, radio, TV, social media and online media). Julien															
			40 Pull up banner to be posted at border areas including airport	District	6000000	40	150000		6000000	4615.384615							
			Web banners to be posted on most popular online media (Igihe, The NewTimes, etc) for 3 months							0							
			Printing of A1 posters (18.000 for 6 districts) for general population, boarder posts, schools, churches, people in uniform and transport companies)	District		18000	15000		270000000	207692.3077							
			Printing of Risk Communication tool kit for ToTs and CHWs (Job Aid) in high-risk zones							0							
			Produce and air 60-minute TV program on RBA	National	66941976	24	2789249	Weekly	66941976	51493.82769							
			Produce and air a 60 minute Radio program on RBA	National	56555040	24	2356460	Weekly	56555040	43503.87692							
			Running presenter mentions on community radio stations	Districts	20250000	360	56250	Daily	20250000	15576.92308							
			Running web banners on online media	National		12	800000	Monthly	9600000	7384.615385							
			Orientation meeting with Journalists and Social Media Influencers	National		30 people	81740	1 day	2452200	1886.307692							

			Engage with target audiences to understand the root causes of vaccine hesitancy to inform content creation	National	RCCE team to travel to targeted districts with high levels of vaccine hesistancy for a period of 7 days. The cost for transportation and Perdiem facilitation to be covered by lead institution	3 people	157	7 days	4347975	3344.596154						
			Work with community health workers to ensure the accuracy and relevance of the information provided in the communication materials.	National	Continuous communication with vaccination teams to compile onground misconceptions and fact check communication materials before publishing				0	0						
			Sub activities	National	Testimonials of targeted groups that have been vaccinated will be recorded to increase relatability, and increase vaccine uptake	10 videos	3952000	N/A	39520000	30400						
			Collaborate with local media and social media influencers to circulate information featuring health leaders and spokespeople discussing the importance of the vaccination.	National	Circulate recorded testimonials and call to action videos on Radio, TV and social media platforms	2	Radio AD: 2,988RWF*60sec TV AD: 6,195RWF *60Sec	30 days	33058800	25429.84615						
		Developing clear communication materials on Mpox vaccination, addressing common concerns and misconceptions, vaccine hesitancy and mitigation strategy. Magnifique	Map out areas with low vaccine uptake and higher levels of hesitancy and design print materials to support onground interventions	National	Circulate, posters, banners, and inforgraphics to vaccination sites, distric health posts, and within communities facing vaccine hesitency	30010	Poster: 1000*15000 Flyer: 200*15000 Banners: 90,000*10	1	18900000	14538.46154						

			Use social media analytics to track public sentiment and identify emerging concerns and misinformation that needs to be addressed.	National	Work with social media listening agencies to compile repports and analytics on new trends of misconceptions and rumors surrounding the Mpox vaccine	1	1200000	3 months	3600000	2769.230769							
		Engage community leaders, religious figures, and local influencers in Mpox awareness campaigns and as trusted messengers. Alice.B	Orientation and training meeting on Mpox with local government leaders, religious, Army, Police, figures, local influencers.	Community	5-day meeting, max 30 participants, hotel catering	1	N/A	1	7500000	5769.230769							
			Transportation & Distribution of Mpox materials (flyres, audio-visual,..) to the community.	Community	Disttribution in 30 districts	1	N/A	1	10000000	7692.307692							
			Monthly Follow up visits and supervision in the community.	Community	5-day Follow up in 30 districts, transportation, perdiems.	6	N/A	1	8000000	6153.846154							
		Conduct regular community dialogues on Mpox prevention, detection, and control measures. Pamela	Organize a cascade training (national RCCE ToT) for Community Front line workers (incl Red Cross Volunteers) on Mpox prevention, detection, control measures	National, District, Sector, Cell, Village (Community)	transport, refreshments, venues, perdiems, mission and communication facilitation fees	11000	50000	1	50000	38.46153846							
			Conduct door-to-door community awareness and engagement on Mpox by trained FLWs	Village (Community)	transport and communication facilitation fees for Community FLWs	7000	1500	12	126000000	96923.07692							
			Facilitate community dialogues at village level (Umuganda, Inteko z'abaturage, Umugoroba w'umuryango, Youth Forums, Women forums, Cooperatives forums...)	Village (Community)	transport and communication facilitation fees for Community FLWs	7000	1500	12	126000000	96923.07692							
			Disseminate Mpox prevention, detection, and control measures messages through Faith based platforms (Imiryango remezo, Mothers Union, Fathers Union, Youth gatherings, Masenge, ...)	Village (Community, Churches, Faith based platforms)	N/A				0	0							

			Conduct capacity building/ToT training for Directors of Education at District level on Mpox prevention, detection, and control measures mobilisation activities in schools	District	transport, acommodation refreshments, venues/conference package, perdiems, mission and communication facilitation fees for one training for Directors of Education from al the 17 districts	1	7000000	1	7000000	5384.615385						
			Conduct capacity building training for schools directors and teachers at community level on Mpox prevention, detection, and control measures mobilisation activities in schools	Sector, Community (schools)	transport, refreshments, venues/conference package, perdiems, mission and communication facilitation fees for one training session in each of the 17 districts	17	3000000	1	51000000	39230.76923						
			Conduct integrated Community roadshows in different parts each district (north, south, centre, west, east)	District	sound system, outdoor advertising truck, LCD screen	34	1200000	6	40800000	31384.61538						
		Establish feedback mechanisms to understand community perceptions and concerns about Mpox and the response efforts. Alice. R	Upgrade call centre system	National	system migration from E1 to SIP	1	4690000	1	4690000	3607.692308						
			Intergration of RCCE questionnaire into the Surveillance system (E-CBS)	National	Designing a questionnaire for CHWs to use while collecting qualitative data on information gaps	1	20100000	1	20100000	15461.53846						
			Cascaded trainning for CEHO's orientation on the intergrated E-CBS and distribute IEC materials in high risk zones	District	Training of lead CHWs in 17 districts at high risk	1	30000000	1	30000000	23076.92308						
			Social listening	National	Monthly subscriptions for social listening tools	1	1340000	6	8040000	6184.615385						
SUBTOTAL									1,291,684,691	987,271						
Points of Entry	Promptly dectect, monitor, timely investigate, and inform response measures to prevent futher transmission of Mpox PoEs	Adapt and update existing SOPs (including health screening protocols) for Mpox to include temperature checks and symptom questionnaires and dessminate to all major PoE	2 Day workshop to adapt/develop screening protocols for Mpox	National	Full conference Package @65000 per day in Kigali for 15 people	15	65000	2	1950000	1500						
			Distribution of screening protocols	National	Distribution of the protcol will be done together with other surveillance tools and SOPs	0	0	0	0	0						

			2 Days workshop to adapt available SOPs to specific POE	District	DSA @ 6000 per day, and Transport @20000 round trip for 20 people	20	26000	2	1040000	800							
		Develop, deploy and integrate the Mpox skin image detection AI tool at key PoE, ensuring its use complements other screening methods	Hire a consultant for the development of tool Develop and deployof the AI tool	National	Activity is in progress	0	0	0	0	0							
			5 Day TOT on the Mpox AI tool and screening protocols for IDSR FP from border district	District	Full conference package @27000per day , DSA @ 55000 per day and Transport @20000 round trip. 20 IDSR FP and 5 facilitators from central level staff)	25	102000	5	12750000	9807.692308							
		Conduct intensive training by trained IDSR FP for border staff on Mpox screening procedures, use of the AI tool, and response protocols	5 Days Training of all POE staff on Mpox screening procedures and referral, use of the AI tool, and response protocols	District	One day training for 880 POEs staff. Training will be conducted in their respective POEs by the trained IDSR FP, 1 PHEOC staff to supervise the activity. Mission alowance @6000 for each POE staff and the IDSR FP, transport @ 20,000RWF for IDSR FP ; SDA @ 55,000 for PHEOC staff, Vehicle hire for PHEOC staff @ 160,000RWF per day	860	26000	1	22360000	17200							
						8	215000	5	8600000	6615.384615							
						12	26000	5	1560000	1200							
		Establish well-equipped isolations at major points of entry for management of suspected Mpox cases and a functional referral system	Procurement of Isolation equipment	District	Isolation Equipment according to identified gaps	9	5000000	1	45000000	34615.38462							

		Implement robust cross-border collaboration mechanisms for pox surveillance and response, including data sharing protocols	Develop cross-border collaboration and information sharing guiding documents	National	1. A 3 day workshop in Kigali to develop the cross-border collaboration and information sharing guiding documents 2. Conference package for 20 participants @ 27,000 per day DSA @55,000 per day and transport @10,000 (one way) for 20 participants	20	92000	3	5520000	4246.153 846							
			Conduct monthly cross-border coordination meetings with cross-borders counterparts	District	In person Meeting with cross border counterparts	0	0	0	0	0							
		Conduct pratical drill at high risk district and simulation exercises at PoE in moderate and low risk districts to test and improve Mpox detection and response procedures	Conduct a one-day practical drill in 5 PoE at high risk disctricts. La corniche, Poids lourds, Rusizi I, Rusizi II, and Bugarama	District	1.One-day drill at each of the 5 PoE 2. Lunch for 5 persons x 5 PoE = 25 persons @6,000RWF per staff per PoE	25	6000	1	150000	115.3846 154							
					DSA @55000 per day for 5 facilitators from the Provincial PHEOC	5	55000	1	275000	211.5384 615							
					Hiring vehicle transport@ 320,000 RWF for two days for 5 PoE each	5	320000	1	1600000	1230.769 231							
			Conduct one-day similation exercise at 4 PoE in moderate and low risk districts. Cyanika; Gatuna, Kagitumba and Rusumo	District	1.One-day drill at each of the 4 PoE 2. Lunch for 5 persons x 4 PoE = 20 persons @6,000RWF per staff per PoE	20	6000	1	120000	92.30769 231							
					DSA @55000 per day for 4 facilitators from the Provincial PHEOC	20	55000	1	1100000	846.1538 462							

					Hiring vehicle transport@ 320,000 RWF for two days for 2 PoE each and @ 160,000 RWF for 1 days for 2 PoE each	1	960000	1	960000	738.4615385							
		Conduct a population mobility mapping (PMM) to inform response activities including surveillance and reporting, screening, refferal	3- day planning/stakeholder workshop	National	Full conference package @ RWF27000 per day, and DSA @ rwf55000 per day for 25 people	25	82000	3	6150000	4730.769231							
			2days Field visit and data collection	District	DSA @ 55000 per day, Transport @20000 per day for 45 people	45	75000	5	16875000	12980.76923							
			Desk work to analyse and map the data collected	District	Data analysis and mapping	0	0	0	0	0							
		Develop mechanism to reach mobile population, for specific interventions	Utilise the displacement tracking matrix to track and follow up with travellers	District	Utilise the displacement tracking matrix to track and follow up with travellers @2 interviewers per POE @rwf55000 per each per day and 2 sessions a week for 3 months	18	55000	24	23760000	18276.92308							
SUBTOTAL									149,770,000	115,208							
Vaccination	Ensure efficient administration of Mpox vaccinations to high-risk populations	Forecasting of needed vaccines	Procure vaccines (MVA/JYNNEOS)	National	145 USD per dose (Equivalent to FRW 188500)	10,000	145	2	3,770,000,000	2,900,000							
		Forecasting of vaccine devices (Syringes)	Procure intra-dermal syringes	National	0.0806 USD per unit of syringe	100,000	0	2	20,956,000	16,120							
SUBTOTAL									3,790,956,000	2,916,120							
GRAND TOTAL									**10,587,099,391**	**8,138,670**							

Rwanda
Biomedical
Centre

Healthy People, Wealthy Nation

Rwanda Mpox Strategic Preparedness, Readiness and Response Plan