



World Health
Organization
REGIONAL OFFICE FOR
Africa



THE CORONAVIRUS DISEASE 2019 (COVID-19)

STRATEGIC PREPAREDNESS AND RESPONSE PLAN FOR THE WHO AFRICAN REGION

1 February 2021 – 31 January 2022

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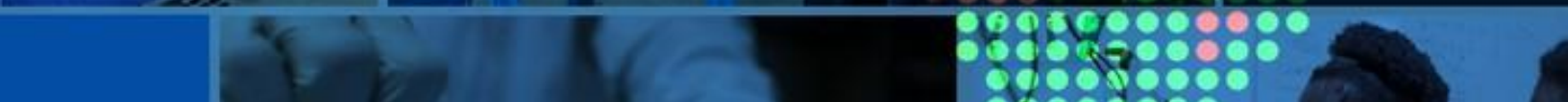
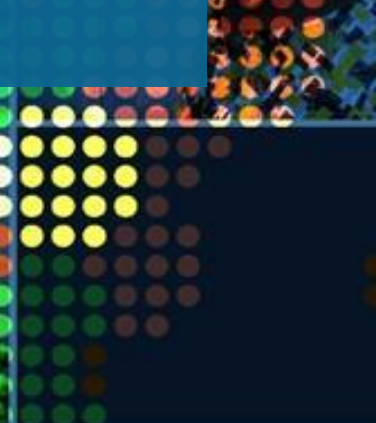


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List of abbreviations

AFR	World Health Organization in the African Region
Africa CDC	Africa Centre for Diseases Control and Prevention
CBO	Community-Based Organization
COVID-19	Coronavirus Disease 2019
CSCS	COVID-19 Supply Chain System
ECHO	Extension for Community Healthcare and Outcomes
HSC	Country Health Service Continuity
IDSR	Integrated Disease Surveillance and Response
IHR (2005)	International Health Regulations
IMS	Incident Management System
IMST	Incident Management System Team
IPC	Infection Prevention and Control
NDVP	Deployment and Vaccination Plan
NGO	Non-Governmental Organization
NRA	National Regulatory Authority
OAFSLAD	Organization of African First Ladies for Development
PHEIC	Public Health Emergency of International Concern
PHEOC	Public Health Emergency Operations Centre
PHSM	Public Health and Social Measure
PoE	Points of entry
PPE	personal protective equipment
RCCE	Risk communication, community engagement
REC	Regional Economic Community
SADC	Southern Africa Development Community
SAGE	WHO Strategic Advisory Group of Experts on Immunization
SPRP	Strategic Preparedness and Response Plan
UHC	Universal Health Coverage
UN	United Nations
UNECA	United Nations Economic Commission for Africa
UNM	University of New-Mexico
VOC	Variant of concern
WFP	United Nations World Food Programme
WHO	World Health Organisation

INTRODUCTION

The Coronavirus Disease 2019 (COVID-19) outbreak was declared a Public Health Emergency of International Concern (PHEIC) on 30th January 2020 and a pandemic on 11th March 2020. The World Health Organisation (WHO) Director General requested all countries to adopt a “Whole-of-Government, Whole-of-Society” approach built around a comprehensive strategy to prevent infections, save lives and minimize the impact¹.

In the WHO African Region (AFR), and consistent with the situation globally, all facets of the society – health, security, political, economic and social - continue to be negatively impacted by the pandemic². In the health sector, the pre-existing fragile health systems were overwhelmed with the surge in cases at the peak of the outbreak. The continuity of essential health services has also been disrupted in many African countries resulting from an imbalance of the demand and supply factors. The most common services affected include routine immunization, facility-based services for non-communicable diseases, antenatal care, family planning and contraception, among others³. The size and evolution of the virus, expanding knowledge on its transmissibility and the countries’ gradual return to the ‘new normal’ signals a reinforcement and sustenance of the efforts to contain the pandemic. Given this context, AFR is engaging in global and regional efforts to support the Member States and partners in improving productivity, efficiency and attaining a sustainable approach to managing a protracted COVID-19 pandemic.

The *2021 COVID-19 Strategic Preparedness and Response Plan (SPRP) for AFR* serves as a regional guide for a holistic public health response to COVID-19 at regional, national and sub-national levels. The 2021 SPRP:

1. Builds upon the lessons learnt from the implementation of the 2020 SPRP and outlines a regional preparedness, response and recovery strategy for COVID-19.
2. Has been adapted to reflect the Regional context including COVID-19 vaccination. It also considers epidemiological changes and recommendations emerging from the evaluation report of the 2020 SPRP⁴.
3. Highlights to Member States strategic preparedness and response actions to be sustained at national and sub-national levels, as well as the critical inter-agency and partner support required.
4. provides the indicative resource requirements to reinforce WHO planned interventions in the African Region to enhance countries’ capacities to suppress transmission, save lives and mitigate the impact of the pandemic on people and health systems.
5. Provides a road map for mitigating potential resurgence in the Region as economies reopen and ensure country level continuity of other essential health services.

¹ WHO Director-General's opening remarks at the media briefing on COVID-19 - 11 March 2020 <https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020>

² Assessing the impact of COVID-19 on Africa’s economic development https://unctad.org/system/files/official-document/aldcmisc2020d3_en.pdf. Accessed on the 9th November 2020

³ Pulse survey on continuity of essential health services during the COVID-19 pandemic: interim report, 27 August 2020 https://www.who.int/publications/i/item/WHO-2019-nCoV-EHS_continuity-survey-2020.1

⁴ World Health Organization (2021). Report on the Strategic Response to COVID-19 in the WHO African Region: February – December 2020, under publication.

Part I: OVERVIEW

Epidemiological situation

The Coronavirus disease 2019 (COVID-2019) epidemic that originated in China remains active in all the 47 Member States in the African region and continues to cause unprecedented socio-economic disruptions. As of 25 February 2021, cumulatively, over 111.7 million laboratory confirmed cases and over 2.4 million deaths had been reported globally from over 190 countries, areas or territories. In the WHO African Region, all 47 countries had reported a total of 2,789,965 confirmed cases and 71,204 deaths with case fatality rate of 2.6%. South Africa (1,507,448); Ethiopia (155,234); Nigeria (153,842) Algeria (112,461); Kenya (104,780); Ghana (81,245); Zambia (76,484); and Mozambique (56,920) have reported over 50,000 confirmed cases. A total of 2,473,939 patients have recovered from COVID-19 since the importation of the pandemic in the Region, representing a regional average recovery rate of 88.7%.

An exponential increase in the number of healthcare workers infections from 307 (as of 24 April 2020) to 95,587 (as of 25 February 2021) has been observed.

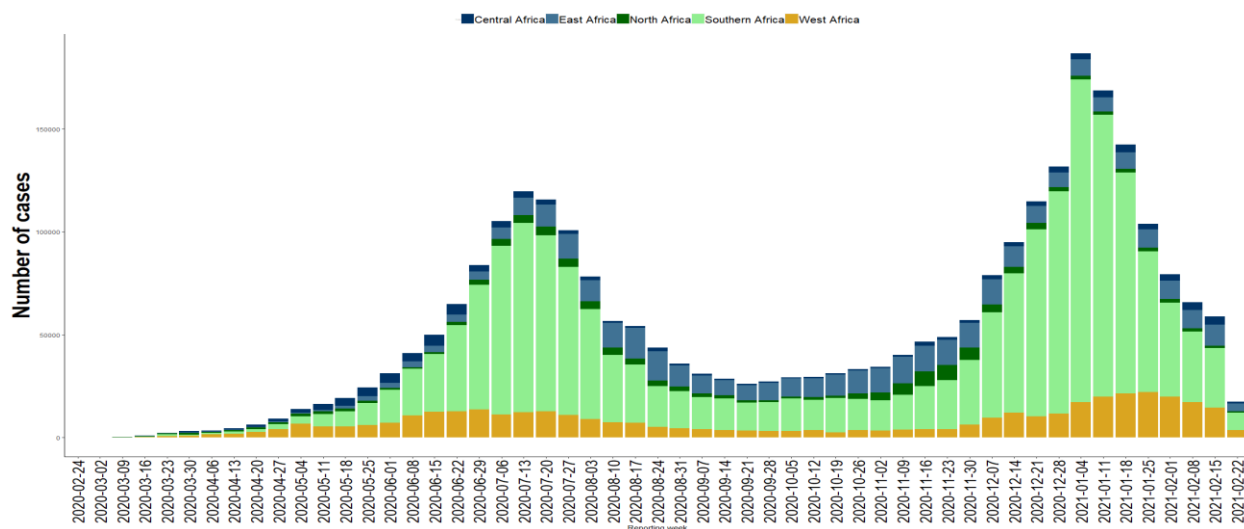


Figure 1: Epicurve of COVID-19 in African Region as of 25 February 2021

As shown in figure 1 above, the Region witnessed a second wave with increased COVID-19 new infections and deaths in the African Region since November 2020 and reached a peak towards the first week of January 2021. Although a decreasing trend in the number of cases in some of the most affected countries was observed in the first quarter of 2021, there was a continuing rise in a few other countries especially in the Central African sub-region. Particularly concerning for the Region is the emergence of new variants of SARS-CoV-2 which are associated with this increase in the number of cases due to their high transmissibility. Following the announcement of the first new variant (B.1.1.7) of the Coronavirus by the United Kingdom in September 2020, South Africa confirmed the circulation of a second new variant of SARS-CoV-2 called 501.V2 (also known as B.1.351 or 20H/501Y.V2) in December 2020. As of February 2021, this variant has been reported in at least 31 countries worldwide including at least eight⁵ countries in the African Region.

⁵ Botswana, Comoros, Ghana, Kenya, Mozambique, South Africa, United Republic of Tanzania and Zambia

Current risk assessment

Several countries in the African region implemented early comprehensive and strict public health and social measures at the onset of COVID-19 pandemic. These measures were maintained for many months, and for some until a substantial decrease in transmission was observed. However, public health interventions to the recent resurgences have lagged in many countries and have had less impact on reducing transmission, due to lower compliance and inconsistent application of control measures.

During the first quarter of 2021, several SARS-CoV-2 variants have been identified that are of concern and preliminary evidence suggests that they may have increased transmissibility or reduced virus neutralization among humans. Much remains unknown regarding the impact of these variants on disease severity, re-infection, detection capacity and vaccine efficacy. The spread of the variants has reinforced the need to strengthen mechanisms to identify and prioritize potentially relevant mutations in the Region; and the need to reduce overall transmission rates through established control methods, to reduce the negative impact of mutations.

Countries continue to report challenges with national capacities for COVID-19 response while maintaining sufficient resources for continuity of essential health services. These challenges continue to be exacerbated in fragile, low-resource settings and countries experiencing other humanitarian emergencies. The resurgence of infections has affected health care institutions, prisons and other vulnerable groups more than during the initial surge in 2020. There is potential for further resurgences given the weak implementation of public health and social measures, the emergence and spread of new variants and the existing health system challenges.

While the COVID-19 supply chain mechanism has improved considerably since the beginning s of the pandemic, supply chain systems are still not sufficient and remain vulnerable to potential industrial and transport shutdowns, export and border restrictions, in the face of continued high demand. Moreover, there continues to be severe challenges related to lack of essential equipment and human resources to treat severe cases even in countries with optimal healthcare systems. Additional logistic challenges have arisen with the approval of vaccines for Emergency Use and the need for vaccine distribution. While the supply chains have scaled up availability and delivery of protective and curative items, further increased demand still faces a lack of essential equipment in institutions dealing with high risk and vulnerable groups, as well as a surge in the demands for health staff and the limited health facility beds available for active care of the most ill.

As of 16 March 2021, seven COVID-19 vaccines (Pfizer/BioNTech, Moderna, AstraZeneca/Oxford, Johnson & Johnson, Gamaleya, Sinopharm and Sinovac) have been permitted for use by select national authorities; four have been given Emergency Use Listing by WHO (Pfizer/BioNTech, AstraZeneca-Oxford, Serum Institute of India/AstraZeneca, Janssen/Jonson & Johnson). As of 12 March 2021, over 300 million people have received COVID-19 vaccines in over 130 countries worldwide including 18 in the African continent and 16 in AFR⁶. While COVAX is on track to meet its goal of covering 20% of the population in all countries by the end of 2021, competing bilateral arrangements and logistical complexities pose challenges to equitable distribution of vaccines. Despite the exceptional speed of vaccine development and promising plans for vaccine programme implementation, it is unlikely that COVID-19 vaccines will have sufficient impact to substantially reduce transmission globally, at least in the first half of 2021.

The understanding of the complex immune response triggered by the SARS-CoV-2 virus continues to grow with much remaining unknown about the extent of population-level naturally acquired immunity, long-

⁶ Algeria, Angola, Côte d'Ivoire, Ethiopia, Equatorial Guinea, Ghana, Kenya, Lesotho, Malawi, Nigeria, Rwanda, Senegal, Sierra Leone, South Africa, Uganda, Zimbabwe

term health impacts (i.e. post-COVID syndrome or long COVID), which can range from symptoms such as fatigue, headache and shortness of breath to physiologic limitations in lung, cardiac, and neurologic functions and have been reported even amongst those who experienced mild illness in the acute phase. Additionally, to date there is only one treatment, systemic corticosteroids, known to reduce mortality in patients with severe COVID-19, limiting treatment options and putting more pressure on supportive care alternatives. Due to all the above reasons, the evidence of increased virus mutations is expected and most arise without direct benefit to the virus. However, over the last few months, several SARS-CoV-2 variants have been identified that are of concern and preliminary evidence suggests that they may have increased transmissibility or reduced virus neutralization among humans. Much remains unknown regarding the impact of these variants on disease severity, re-infection, detection capacity and vaccine efficacy. The spread of these variants has reinforced the need to strengthen mechanisms to identify and prioritize potentially relevant mutations in the Region; and the need to reduce overall transmission rates through established control methods, to reduce the negative impact of mutations. With the potential for the existing licensed COVID-19 vaccines to be partially or significantly less effective against a variant of concern (VOC), combined with the high probability that the proportion of SARS-CoV-2 cases due to new variants will increase, the risk associated with further spread of the SARS-CoV-2 VOCs in the African Region is currently assessed as **high** to **very high** for the overall population and **very high** for vulnerable individuals.

Implementing the 2020 SPRP: key achievements, challenges and opportunities

Achievements, challenges and opportunities emanating from the implementation of the SPRP 2020 are listed below.

Achievements:

- Early and rigorous risk assessment and development of COVID-19 preparedness and response plans facilitated early response in all the 47 countries.
- Early establishment of the regional Incident Management System Team (IMST), recruitment of senior advisors for strategic guidance and mobilization of internal surge capacity using staff repurposed from all clusters as country focal points or members of functional pillars (exemplified a “whole of Organization” approach) was innovative.
- Training of over 12 500 healthcare workers at national and subnational levels in all countries, with over 37 webinar sessions on diverse topics, including sharing of best practices sessions using strategic partnership with the University of New-Mexico (UNM), the project ECHO (Extension for Community Healthcare and Outcomes) and collaborations with professional associations.
- In collaboration with partners, mobilization of more than 300 000 community health workers in the Region who have been supporting several COVID-19 related activities, from risk communication to monitoring of patients under home-based isolation and care.
- Leveraging in-house capacity and experiences from other clusters such as the use of Polio eradication programme assets which promotes sustainability and allowed early human and financial resources mobilization to initiate readiness activities in priority countries
- Establishment of laboratory genomic diagnostic network of COVID-19 confirmation and further characterisation through sequencing. All the 47 countries have laboratory capacity for detection of COVID-19 using Real Time Polymerase Chain reaction testing.

- Reinforcement of capacities including the deployment of experts to all the 47 countries in the region
- Transformation of the “continuity of essential services” sub-pillar into a complete pillar (the 9th pillar) dedicated to health systems and services (in close collaboration with the various specific programs) to provide support to the Member States already engaged in the resumption of services and response to other "non-COVID-19" activities.
- Finance and material resources mobilization including distribution of supplies, such as personal protective equipment (PPE), lab equipment and reagents as well as other medical devices (oxygen concentrators, patient monitors, etc).
- Establishing partnerships with United Nations (UN) Agencies, Non-Governmental Organizations (NGOs) and other key partners (such as African Union Commission, OAFSLAD, UNECA and SADC) at regional, sub-regional and national levels enabled synergy among partners and improved resource mobilization and allocation. The partnership with United Nations World Food Programme (WFP) provided the special humanitarian flights for deployment of experts
- North- South cooperation:
 - Cooperation in the area of capacity building.
 - Deployment of emergency medical teams to some countries.
 - Financial support from bilateral donors and philanthropists to countries and the Regional Office.
- Dissemination of strategic and technical guidance adapted to regional contexts, such as the COVID-19 module in Integrated Disease Surveillance and Response (IDSR) as part of health systems strengthening.

Challenges:

- Funding the unpredictable financial flow to WHO AFR has hindered proactive planning and implementation of the strategic response plan.
- Lack of political will in some countries, poor compliance to some WHO guidance, limited human and technological resources and closure of borders and airports further complicated coordination of a timely response to the 47 countries.
- Less attention for calibrated support for the humanitarian situation or chronic crises in “fragile” states given the proportion of vulnerable people.
- The inadequate leadership, technical and operational guidance on a sub-national, decentralized response is associated with the weak country capacity and partners’ prioritization or allocation of resources for health system strengthening or continuity of essential services including immunization, maternal health services, communicable and non-communicable diseases
- Constrained availability of local health products and supplies requiring procurement and importation from countries outside the Region.
- Challenges with procurement and supply functions persist, which may be due to border closures, general shortages in the global market, challenges related to a longer turnaround time for orders and inaccessibility of some of the goods in the UN supply portal, as well as suboptimal coordination and information sharing among partners
- Country Incident Management System challenges range from weak capacity and resources at the sub-national level and inability to influence decisions that are taken at Prime Minister or Presidential levels mostly influenced by economic and political concerns

- Weak health systems and competition for relevance between international organizations resulting in poor coordination and duplication of effort.
- Inadequate data sharing by Member States and lack of robust data management due to weak capacities and systems.
- Illegal border crossing at non-official points of entry compromised containment efforts.
- Reluctance of couriers to ship laboratory specimen due to fear of COVID-19.

Opportunities:

- With the availability of more options for testing, including using RDTs, improvements in national testing capacities are expected in the future.
- There are several vaccines and therapeutics in phase III trials showing efficacy of >90% in the preliminary analysis presenting an opportunity for countries to ramp up vaccine readiness activities.
- The slower emergence of the COVID-19 pandemic on the African continent than other global regions provides an opportunity (albeit brief) to review and understand the factors contributing to the resurgence in the other regions and use these findings to inform planning processes and strategies for the African continent. This is critical, given the fact that most of the health systems on the continent have been weak even before the pandemic.
- The fact that the pandemic has slowed down (though few countries have started experiencing a surge in cases) provides an opportunity to conduct quality Intra-Action Review to identify best practices, bridge gaps, plan for resurgence and improve the overall quality of the response.

Part II: WHO AFRICAN REGION STRATEGY

Goal and strategic objectives

Goal:

The main goal is to control COVID-19 in ALL countries of the WHO African Region by strengthening and sustaining response capacities at national and subnational levels to mitigate its public health and socio-economic impacts.

Strategic Objectives:

- **Improve and maintain country readiness and response interventions** to contain and mitigate COVID-19.
- **Reduce exposure** by fighting disinformation and misinformation, communicating with, engaging, and empowering communities to adopt risk-reducing behaviours and practice infection prevention and control. This will include psycho-social support for the recovered.
- **Suppress transmission** of COVID-19 through the implementation of effective and evidence-based public health and social measures, including detecting and testing suspected cases, investigating cases, tracing and quarantining contacts, shielding high-risk groups, and reducing exposure to potentially infectious contacts.
- **Reduce mortality and morbidity from COVID-19 and all other causes** by ensuring that COVID-19 cases are diagnosed early and given quality care; that clinical pathways are managed to ensure that all patients receive quality care; increasing and sustaining the capacity for both COVID-19 care and other essential health services and systems, and by guaranteeing access to essential commodities.

- **Accelerate equitable access to new COVID-19 tools** including vaccines, diagnostics and therapeutics, and support safe and rational allocation and implementation in all countries in the Region.
- **Protect the most vulnerable** populations through vaccination by building vaccine acceptance; ensuring vaccine deployment readiness in all countries and by communicating, implementing, and monitoring COVID-19 vaccination campaigns.
- **Strengthen the existing regional coordination mechanisms** for strategic, technical, and operational support to countries in collaboration with regional, sub-regional, national and international partners.
- **Support integration of the COVID-19 response within the health system** and minimize the socio-economic impact of a prolonged COVID-19 response
- **Conduct robust and continuous monitoring, evaluation and research** of the response in all countries using key performance indicators (KPIs).

Planning assumptions and response options

The impact of the pandemic in the Region has shown to be different from the rest of the world due to demographics, social, environmental and economic development factors. This may have implications for severe COVID-19 cases, mortality & health services demand. In the African context, the following are the possible drivers of COVID-19 transmission.

Risk of exposure: The high season for respiratory pathogens (e.g. influenza) in the Southern Africa hemisphere may lead to more intense transmission of COVID-19. In addition to this, are practice of sanitation and hygiene, access to water, poor road networks, population density, urban slums, social-cultural, living conditions and other contextual factors.

Demographics: Everyone is susceptible to contracting the disease, however, the available data so far reveals that there is an association between the age and the severity of disease mainly due to the high prevalence of underlying conditions. The most affected population in Africa is younger people and probably with no underlying disease. Although they may require ventilator support, it is probable that the majority may survive with simpler, more rapidly scalable interventions such as finger oximetry and high-flow oxygen. Severe and critically ill COVID-19 patients often require weeks of ventilator support to survive. Such capacities are particularly limited in Sub-Saharan Africa.

Health systems: In the African Region, health systems are generally weak with shortage of skilled health workers, lower density of health infrastructures and inequity in distribution, inadequate or poor medical equipment and medical supplies, among others. The health systems are already overstretched with the routine service needs and are at risk of amplifying the COVID-19 disease. Indeed, this pandemic is testing the health system and services. Moreover, in COVID-19 affected countries, nosocomial transmission has been a particularly important factor that has contributed to increase the spread of the disease, as several health care workers have been infected. Increased infection rates among healthcare workers may be due to a combination of low awareness, lack of sufficient PPE, inappropriate PPE use and unrecognized disease (e.g. due to lack of diagnostics). The current international air travel restrictions exacerbate the challenge of a widespread lack of appropriate medical equipment and PPE in the Region.

Disease burden: The African region has a high burden of chronic communicable and non-communicable conditions particularly among the economically active age group. These conditions fuelled by the prevailing high level of poverty are being associated with more severe COVID-19 outcomes.

Socio-economic, cultural and political factors:

In many African societies, cultural and social activities tend to encourage the congregation of people. Strong community structures in Africa can be leveraged for critical public health measures. Based on the

lessons learned during the Ebola outbreak in Africa, there is a clear demonstration on the important role of the community structures in outbreak response. Although this was mainly rural areas, there is a need to explore the most effective way of using similar structures in urban settings. Currently, more males than females are affected in the age groups of 31 to 49 years. However, this might change given the expected intense community transmission and increased home-based care; women and children may be more affected. The type of housing (less spacious houses), the conditions in public transport, the low coverage of safe water are all limitations in the application of social distancing, isolation in the home and hand washing. The economic activities in Africa are mainly informal making it more difficult to identify and track contacts and put in place economic mitigation measures.

Testing capacities: The capacity for COVID-19 testing has improved from 2 national laboratories in February 2020 to nearly 1000 laboratories across the Region and availability of rapid Antigen diagnostic tests. However, there remain challenges in increase testing to the required level (10 per 10 000 population) and long Turn-around Time of returning results delays in confirmation due to insufficient quantities of testing kits.

Genomic Surveillance: There has been an increase in number of countries within the continent publishing sequencing data from approximately 15 in December 2020 to over 35 by March 2021. The sequencing data currently produced is close to 9000 compared to 4000 produced by end of 2021. Challenges still remain as some countries are still supported by others due to lack of sequencing capacity and funding. In addition, is the limited regional capacity on the usage and understanding of bioinformatics tools.

Scenarios and response options

Several countries in the WHO African Region are witnessing a declining trend in the number of new confirmed cases of COVID-19, an indication of possibly having gone beyond the peak of the second wave of the pandemic, while others are experiencing an increasing trend. These two scenarios are likely to be observed in the coming months especially until there is some sufficient population immunity with ongoing vaccination which just started in the Region. At different points in time, countries may be dealing with *sporadic, cluster of cases* or *resurgence of cases* in a third wave as some parts of the Region move towards high season for respiratory pathogens (e.g. influenza) in the Southern Africa hemisphere. Furthermore, numerous factors can be attributed to resurgence of COVID-19 in Member States. These factors include relaxation of public health restriction measures, behavioural changes/patterns, increased travel due to opening of national borders, mass gathering events, and fatigue leading to non-compliance and complacency. Also, Governments continue to open up businesses, workplaces and schools. It is, therefore, critical that Member States continue to enhance their readiness and response capacities to handle future waves.

Based on the current epidemiological situation in the Region with the pandemic fatigue and increased circulation of more transmissible variants, immediate, strong and decisive public health interventions are essential to control transmission and safeguard healthcare capacity. This will involve all Member States ensuring implementation of stricter Public Health and Social Measures (PHSMs) is strengthened and maintained in the coming months in order to reduce SARS-CoV-2 incidence to the lowest levels possible, thereby also minimising the opportunities for new variants to emerge.

Optimising the implementation of PHSMs, including issues related to community use of facemasks and school settings, is essential. Test, track and trace approaches, including strong surveillance and sequencing, remain the cornerstones of the response. Travel should not be undertaken by people who are ill or who have had recent contact with COVID-19 cases. Furthermore, non-essential travel should be avoided as part of general physical distancing measures in the community. Over time, targeted and robust vaccination programmes will enable gradual easing of PHSMs.

Variants against which currently licensed vaccines might have a reduced efficacy, as observed for some vaccines with the B.1.351 variant first identified in South Africa, will probably continue to emerge in the future. This should be mitigated by designing next-generation vaccines with mutated spike sequences and using alternative viral antigens. Consideration should also be given to their use either as booster doses for those vaccines which have already been developed and are being administered, or, if needed, for the primary series.

Increasing levels of pandemic fatigue need to be properly addressed if further waves of infection are to be avoided and population compliance is to be maintained. Public expectations about the likelihood of easing restrictions need to be carefully managed. To facilitate this, Member States should make systematic efforts to ensure that they have a good understanding of community perceptions of the pandemic, the PHSMs in place and COVID-19 vaccine acceptance through ongoing behavioural research.

Strategic response pillars

Based on the identified areas, remaining gaps in the response and key priorities identified by WHO to meet the strategic objectives, WHO will undertake actions focusing on capacity building and operational support in the following 11 pillars with some cross-cutting as shown in figure 2:

- Pillar 01: Coordination, planning, financing and monitoring
- Pillar 02: Risk communication, community engagement (RCCE) and infodemic management
- Pillar 03: Surveillance, outbreak investigation and calibration of public health and social measures
- Pillar 04: Points of entry, international travel and transport, and mass gatherings
- Pillar 05: Laboratories and diagnostics
- Pillar 06: Infection prevention and control and protection of the health workforce
- Pillar 07: Case management, clinical operations and therapeutics
- Pillar 08: Operational support and logistics, and supply chains
- Pillar 09: Strengthening essential health services and systems
- Pillar 10: Vaccination
- Pillar 11: Research, innovation and evidence



Figure 2: COVID-19 SPRP 2021 Public Health Response Pillars

The 2021 Strategic Preparedness and Response by Pillars

The 2021 COVID-19 Strategic Preparedness and Response Plan is articulated around the 11 Pillars of the response. The plan provides a brief description of the strategy and the key activities that WHO will implement.

Pillar 01: Coordination, planning, financing and monitoring

Coordination, planning, strategic communications and monitoring at the global, regional, national, and subnational levels play a critical role to ensure effective pandemic preparedness, readiness, response, and early recovery. This includes an inclusive multisectoral coordination mechanism aimed at removing duplication of efforts and maximizing the available resources. Each country's coordination mechanism and response plan should be contextualized based on the identified risks focusing on vulnerable communities.

This plan leverages the existing coordination systems for emergencies. It promotes inter-pillar coordination, and streamlines communication across all relevant stakeholders, including operational partners and with the media and the general public. An operational synergy of the health sector development partner coordination mechanisms is key to tackle the ongoing challenges with the continuity of essential services and make regular services safe and accessible. This revised WHO COVID-19 SPRP 2021 Monitoring and Evaluation Framework will be launched with revisions to key performance indicators to better plan the implementation, inform decision-making in real-time, support the member states, and monitor the response to the pandemic.

The plan focuses on having a holistic approach to public health and social measures that prevent and control COVID-19 transmissions while also enhancing the survival and preservation of individuals' dignity. The public health measures should effectively maintain a low or no transmission levels and have the surge capacity to rapidly control cases. In the case of community transmissions and the health systems being overwhelmed, measures will need to be taken to limit further potential disease spread. In some countries, there may be a need to support multiple emergency responses, especially in fragile and conflict-affected contexts. Countries should review levels of preparedness to manage concurrent emergencies, informed by the country emergency risk profiles. Further linkages to existing emergency response mechanisms need to be made to ensure streamlined coordination for all operators. Since countries are affected in different ways, more so in terms of the impact of COVID-19 and the disruption of the delivery of other essential services, there is a need to determine the right balance between epidemic control and maintaining essential services safely. It is important that countries follow WHO guidance and learn from each other and a key component of this plan is communicating effectively best practices and important guidance.

In this pillar, the following key activities (but not limited to) will be undertaken by WHO:

- ➔ Support the Member States, stakeholders and partners to ensure better coordination of early detection, clinical care and decentralization of response.
- ➔ Enhance collaboration/coordination with the Africa Centres for Diseases Prevention and Control (Africa CDC), the Regional Economic Communities (RECs), National and International Non-Governmental Organizations (NGOs) and United Nations Resident Coordinators to mobilise and safely deploy experts to support the response.
- ➔ Strengthen the solidarity systems for action in Africa to mitigate socio-economic disruption. This includes North-South and South-South cooperation and intra-community's solidarity in the same country.
- ➔ Support the review and update of the national plans to align with SPRP COVID-19 guidelines
- ➔ Develop an effective functioning multi-sectoral multi-partner coordination mechanism [Public Health Emergency Operations Centre (PHEOC), National Taskforce, etc.].
- ➔ Build capacity of the IMSTs, PHEOCs staff, and decision-makers at national/subnational levels as appropriate.
- ➔ Strengthen the identification of Risk Communication and Community Engagement actions tailored toward specific population groups and settings to address knowledge, rumours and misinformation.
- ➔ Ensure health authorities, policy makers and the public receive up-to-date information on COVID-19
- ➔ Ensure key partners have confidence in WHO and follow its advice and guidelines at both the regional and country level by demonstrating the impact of WHO's work.
- ➔ Strengthen the procedures to share data and risk assessment findings with national and international stakeholders, including mapping vulnerable populations.
- ➔ Assist countries to monitor the implementation of their COVID-19 response plans.
- ➔ Support the mobilization of local resources from in-country partners.
- ➔ Monitor the response to the pandemic continuously and making necessary adjustments.
- ➔ Conduct after-action reviews in accordance with the International Health Regulations (IHR 2005) as required.
- ➔ Support decentralization of the coordination structure at regional and district levels.

Pillar 02: Risk communication, community engagement and infodemic management

This pillar aims to reduce the negative impacts of COVID-19 on individuals and communities by using evidence-based approaches. It provides timely, credible, and relevant information to manage the

infodemic (an overabundance of information, including misinformation) and ensures the people-centred and community-led approaches are championed widely, resulting in increased trust social cohesion.

A whole-of-society approach with every community member's participation to take action and prevent transmission is required. People's behaviours and their willingness and ability to follow public health and social measures remain the most powerful means to stop the spread of the virus. Thus the need to elevate the role of risk communication and community engagement (RCCE) in breaking the chains of transmission and mitigating the impact of the pandemic with no one-size-fits-all solutions. RCCE will be crucial in fighting hesitancy and anti-vaccine misinformation, for example, pandemic fatigue with a protracted crisis and navigating through the COVID-19 infodemic (too much information).

Countries will need to move towards evidence-driven, people-centred and community-led approaches to the response. Coordinated, adaptive, innovative, and localised approaches to engage communities around COVID-19 will be crucial in controlling the virus in the coming months. This will result in increased trust and social cohesion, and ultimately a reduction in the negative impacts of COVID-19. To achieve this, the following key activities (but not limited to) will be undertaken by WHO:

- Facilitate community-led responses through the improvement of the quality and consistency of RCCE approaches.
- Strengthen coordination of RCCE to increase quality, harmonisation, optimisation and integration.
- Reinforce capacity and local solutions to control the pandemic and mitigate its impacts.
- Manage the infodemic to ensure that individuals and communities have evidence-based factual information at the right time from their trusted sources of information to make informed decisions.
- Support countries to have infodemic management response systems in place to handle the large flow of disinformation.
- Respond to the infodemic by monitoring and analyzing the disinformation that is circulating and developing effective content to combat the disinformation and monitoring the effectiveness of such content.
- Generate analysing and using evidence about community's context, capacities, perceptions, and behaviours.
- Develop and disseminating Information, Education and Communication (IEC) materials tailored for specific population groups.
- Strengthen capacity building of media institutions, health workers, community leaders and civil society groups.
- Train health and non-health organisation to empower communities
- Partner with Non-Government Organization (NGOs), Community-Based Organisations (CBOs) and regional and international organisations to mobilize communities.
- Support mobilisation of the public for COVID-19 Vaccination.
- Support implementation of RCCE Plans for key sectors such as Education, Transport, Tourism and Hospitality.
- Strengthen leadership for coordination and management of RCCE.
- Implementing Monitoring & Evaluation protocols to monitor RCCE implementation, documenting successes, challenges and opportunities.
- Document experiences in hand washing, social and physical distancing among other measures.
- Prepare Policy Briefs and Guidance documents on COVID-19 prevention measures.

Pillar 03: Surveillance, outbreak investigation and calibration of public health and social measures

COVID-19 surveillance data are essential to detect cases, monitor trends and calibrate appropriate and proportionate public health measures. People suspected of having COVID-19 should be rapidly identified,

tested, isolated and cared for probable or confirmed cases. Contacts of probable or confirmed cases should also be rapidly identified, quarantined and monitored for any signs and symptoms of COVID-19. In a scenario of community transmission, surveillance will focus on monitoring the geographical spread of the virus, transmission intensity, disease trends, infection prevalence, characterise virological features, and assess impacts on health-care services.

In settings where large scale testing of suspected cases is limited or not possible, it is important to 1) monitor overall trends for mortality or respiratory diseases (influenza-like illness (ILI), acute respiratory infections, and Severe Acute Respiratory Tract Infections based on syndromic surveillance; and 2) undertake early detection of COVID-19 spread through laboratory confirmation focusing on a limited number of cases within clusters with a focus on health workers, those with severe disease, and closest contacts. In addition to understanding the transmission scenarios present in a country with the greatest granularity possible, it is important to track health system capacity and performance to determine which public health and social measures (PHSM) apply.

If community transmission occurs and if there is also a risk of having the health system overwhelmed, measures should further limit the potential for disease spread through a combination of individual and community measures. Due to the considerable social and economic costs associated with stringent PHSM measures, their implementation should be agreed on with the participation of relevant sectors, with the full understanding and involvement of communities, and based on the principle of doing no harm. The measures should be time-bound and regularly reviewed. The rationale and intended public health benefits of implementing PHSM to control Covid-19 must be effectively communicated to the affected populations and communities engaged.

In low capacity and humanitarian settings, critical measures for COVID-19 prevention and control may be more difficult to implement and potentially more harmful to many community members' survival. In these settings, capacities for testing, isolating and treating those who develop the disease, and tracing and quarantining contacts, may be severely lacking. Health actors working on and in fragile settings should focus on monitoring and reducing all-cause excess morbidity and mortality, based on the local understanding of the pandemic's severity and other health needs. In doing so, there may be a need to prioritise protecting and safely restoring non-COVID-related essential health services, alongside feasible and proportionate COVID-19 control measures and investment in mechanisms to monitor health outcomes beyond COVID.

Some of the key activities in this pillar that will guide the WHO response include but not limited to:

- Strengthen COVID-19 early warning and alert management systems in the Member States.
- Support implementation of tools and information systems for data management, including Early Warning Systems and Go.Data.
- Strengthen production and dissemination of epidemiological and social science reports, including scientific publications.
- Collaborate with institutions on analysis and advanced outbreak modelling and projections
- Strengthen national capacities for Geographic Information System modelling and analysis.
- Conduct forecasting using statistical modelling for predictive analysis of epidemiologic trends.
- Support all countries to conduct adaptation, validation and training of trainers on IDSR 3rd Edition technical guidelines.
- Support countries to implement essential surveillance approaches for COVID-19 using the IDSR strategy.
- Support the harmonisation and implementation of updated surveillance tools, guidelines and software, including those at the Point of Entries.
- Update surveillance policy/strategy that guides countries on how to respond during community transmission and high attack rate, festive seasons, mass gathering, reopening of

schools/offices/institutions, new variants, testing capacities/decentralization of testing, RDTs, long term capacities/institutionalize capacities.

- ➔ Conduct regular webinars on COVID-19 related topics in different languages to promote the integration of interventions (such as surveillance, contact tracing, other pillars).
- ➔ Support the Member States to review, harmonise and adopt new technologies for surveillance, contact tracing to enhance efficiency through automation of processes.
- ➔ Conduct training for rapid response teams composed of clinical management, public health, animal health and laboratory experts (One Health approach RRTs).
- ➔ Establish a digital certification and e-registry platform for COVID-19 immunisation campaigns targeting adults.

Pillar 04: Points of entry, international travel and transport, and mass gatherings

Efforts and resources in the context of international travel and transport should focus on implementing adequate risk mitigation measures as outlined in the Interim Guidance on “Considerations for implementing a risk-based approach to international travel in the context of COVID-19”. These actions should be informed by a thorough and regular risk assessment, taking into account the local epidemiology in departure and destination countries; travel volumes between countries, public health and health services capacity and performance to detect and care for cases and their contacts, including among travellers, in the destination country.

Measures include advice to travellers, self-monitoring of signs and symptoms, multisectoral coordination and planning for disease prevention and control, surveillance and case management at the point of entry and international contact tracing. Besides, risk mitigation measures include exit and entry screening for signs and symptoms, testing targeting international travellers, and quarantine for international travellers. If testing is used in the context of international travel, it should be informed by a thorough risk assessment, targeting travellers arriving from areas with higher incidence. Testing resources should never be diverted from high-risk groups. International Health Regulations (IHR (2005)) capacities for points of entry should be enhanced to limit the international spread of COVID-19, including new variants, especially in countries with sporadic and a cluster of cases.

Implementation and relaxation of Public Health and Social Measures (PHSM) should be based on risk assessment and applying risk mitigation measures. In accordance with provisions of the IHR (2005) *article 43*, the Member States implementing additional measures should base it on scientific evidence and inform WHO of these measures, including the rationale for its implementation. WHO will, in turn, make this information available to IHR (2005) states parties?

The following (but not limited to) key activities will guide the WHO response in this pillar:

- ➔ Track and monitor the implementation of public health and social measures, including IHR (2005) additional measures and compliance with IHR *article 43*.
- ➔ Support Member states to conduct risk assessments and apply risk mitigation measures for mass gatherings and other PSHMs.
- ➔ Provide technical support for the implementation of the Public Health Emergency Contingency Plan for the PoE to strengthen the IHR (2005) capacities.
- ➔ Support cross-border collaboration to ensure harmonization of policies, practices and assessments at points of entry (PoE).
- ➔ Support training of PoE staff on isolation and initial case management of ill travellers and suspected COVID-19 cases.
- ➔ Strengthen of PoE data management systems for action and decision making to guide the response, including cross-border data sharing for surveillance purposes.

- Conduct webinars on cross-border collaboration with countries and key stakeholders.
- Review and update PoE plans and their implementation.
- Conduct simulation exercises to test the developed PoE plans.
- Monitor and evaluate PoE implementation plans.
- Monitor and evaluate the effectiveness of measures being implemented at points of entry and recommending adjustments as appropriate.
- Recommend to the Member States appropriate confinement measures to reduce the risk of social-economic disruptions.
- Support countries to conduct Intra-Action Reviews (IARs) and After-Action Reviews (AARs).

Pillar 05: Laboratories and diagnostics

Diagnostics play a key role in the prevention of spread of COVID-19 as they enable rapid identification of infected individuals so that public health measures can be implemented. Extensive and systematic testing as guided by surveillance objectives, is essential to contain the pandemic and is the only way countries, if they act early, can avoid extensive and economically crippling repeated lockdowns. In addition, it's critical to integrate genomic sequencing in order to promptly detect and respond to - new variants of concern (VOC) as seen with the B.1.1.7, first detected in the United Kingdom, B.1.351, first detected in South Africa, which are spreading fast in the region. Better surveillance and laboratory capacity to monitor variants of concern need to be accompanied by prompt sharing of specimen through globally agreed mechanisms so that critical research can be promptly initiated each time that is needed. Monitoring of genetic changes in SARS CoV-2 is critical in rapidly identifying new viral variants that may have altered or enhanced biological properties which may affect transmissibility, pathogenesis or severity of infection. Diagnostic capacity, including with recently introduced RDTs needs to be scaled up to increase research and development efforts in detecting and understanding SARS CoV-2 impact on the public health response strategy.

Countries should continue to strengthen and sustain domestic diagnostic and laboratory capacity to manage large-scale testing for SARS-CoV-2 at national and sub-national levels, while building on and maintaining the established infrastructure and diagnostic capacity for other relevant diseases. The strategy encourages countries to use national data platforms to document critical clinical, epidemiological and virological data to create an enabling environment for the detection and assessment of new SARS-CoV-2 variants.

A strategic national surveillance and country wide testing strategy should be available that includes: i) a clear structure on coordination, supervision and registration of performed diagnostics and how collaboration with the stakeholders is organized; ii) surveillance/testing strategies for different objectives in the different phases of SARS-CoV-2 circulation; iii) country quality assurance mechanisms through national laboratory systems and national reference laboratories; iv) communication plan for stakeholders and communities to inform when to test v) system in place to effectively collect diagnostic data among all stakeholders for action; vi) strategic national plan provides clarity on how testing is integrated with the other measures in the response and vii) which capacities need to be sustained to strengthen IHR functions. In the event of community transmission, surge plans should be activated to manage the increased volume of samples from suspected cases. WHO can support access to relevant reference laboratories and protocols, reagents, and other supplies through the interagency COVID-19 Supply Chain System (CSCS).

The emergence of new variants of concern of SARS-CoV-2 highlights the need to conduct genomic surveillance and sequencing of specimens from SARS-CoV-2 PCR positive cases through establishment of Continental Genomic sequencing laboratory network. Genomic sequencing is an important tool used for identifying and characterising new variants, in particular variants of concern (VOC). Sequencing data and integrated epidemiological surveillance information and analysis will help to predict resurgences, identify

hotspots for transmission of new variants and track changes in the spread, intensity and severity of COVID-19 and identify their impact on diagnostics, public health measures and medical interventions. WHO encourages countries to provide adequate number of specimens regularly (at least 20 samples per month) for genetic sequencing using a systematic and standardized sampling approach described in the GISRS operational guidance document and Chapter 6.1 of the WHO technical document on genetic sequencing SARS-CoV-2.

As a major step forward, on 10th September 2020, the World Health Organization (WHO) in collaboration with the Africa Centres for Disease Control and Prevention (Africa CDC) launched the Africa Regional Sequencing laboratory Network for COVID-19 and other emerging pathogens. The network of at least 12 laboratories (3 Specialized laboratories and 9 Regional Reference Laboratories) will reinforce genome sequencing of SARS-CoV-2 in all the countries on the African continent. The aim of these regional specialized and regional reference laboratories is to sequence circulating genomes, analyse the data and provide other technical support services for national activities, neighbouring countries and countries in their sub-regions in order to inform evidence-based sound public health interventions. Due to the sudden increase of SARS CoV-2 (VOC) there is a need for progressively scaling up and expanding the number of sequencing laboratories in the region to ensure timely access of genomic data to all countries in the Continent.

The following key activities will guide the WHO response:

- ➔ Support expansion of testing at all levels of the health system using available RDTs and providing testing kits.
- ➔ Guide countries to strengthen laboratory systems to provide adequate support for surveillance, clinical care, research and development
- ➔ Support the establishment of active support supervision mechanisms for Antigen RDT quality assurance schemes, to detect any errors and promptly institute corrective and preventive measures
- ➔ Sustain the external quality assurance mechanisms and interlaboratory quality schemes in countries
- ➔ Guide countries on storing and randomizing representative samples to ensure diagnostics quality and routine genomic surveillance for SARS-CoV-2.
- ➔ Support transportation of samples at International and national level for quality control of diagnostics and sequencing using the existing AFRO sequencing laboratory network.
- ➔ Document sequencing activities for sharing best practices and to inform decision making;
- ➔ Support sequencing laboratories with reagents and consumables in collaboration with relevant partners.
- ➔ Support countries by conducting training on diagnostics, sequencing and bioinformation tools and processes.
- ➔ Use webinars and deployed lab Network laboratory experts for on-site support to general diagnostic and sequencing activities.
- ➔ Support countries to mobilize domestic and external resources in order to conduct IDRS sentinel surveillance, sequencing activities including sample collection and shipment to the assigned genomic sequencing laboratories.
- ➔ Support capacity building activities on integration EPI- LAB surveillance.
- ➔ Support countries on laboratory components in research related COVID-19 topics.
- ➔ Procure laboratory equipment and supplies for newly identified sequencing laboratories.
- ➔ Mobilize together with WHO/HQ and partners, financial support for genomic sequencing and surveillance expansion on the continent.

Pillar 06: Infection prevention and control and protection of the health workforce

Infection prevention and control (IPC) programmes and practices in health facilities and communities is required for the identification and management of patients infected with COVID-19, as well as prevention of transmission to staff, between staff, between staff and patients/visitors, and in the community. IPC practices should also be monitored at national and subnational levels and improved to prevent transmission of healthcare associated infections during the provision of non-COVID health services.

The focus is to ensure community awareness of public health preventive measures, including physical distancing, frequent hand hygiene, respiratory etiquette, appropriate mask use and awareness of the role of ventilation. In the event of shortages of critical personal protective equipment (PPE) safe reprocessing methods or alternatives could be used. Enabling these IPC measures is dependent on access to safely managed water, sanitation, and hygiene (WASH), particularly for vulnerable communities and those populations affected by humanitarian crisis. Health facility level preparedness and readiness should be brought into the central coordination mechanism to further aid in reducing avoidable mortality from COVID-19 and other concurrent emergencies. Particular focus needs to be given to safety and security of health care givers and all frontline workers in the national preparedness and response plan for COVID-19.

The following (but not limited to) key activities will guide the WHO response in this pillar:

- Conduct capacity assessment and mapping of identified health facilities, ICUs, HDUs for case management including IPC capacities of public places and communities.
- Establish a training agreement with the East Africa College of Medicine.
- Support local production of alcohol hand rub gel + Soap and non-medical masks.
- Review, update and disseminate existing national IPC guidance.
- Implement the plan for prevention, identification, monitoring and management of health workers COVID-19 exposure or infection including research.
- Provide training to all health workers on IPC measures including in the context of COVID-19.
- Advocate for water utilities and small-scale providers to provide sufficient safe water to allow for IPC measures in healthcare facilities, hand hygiene in homes, public and community settings.
- Promote public awareness/ education on preventive public health measures.
- Develop or reviewing the national plan to PPE supply and to identify IPC surge capacity needs and include direction for alternatives or local production if necessary.

Pillar 07: Case management, clinical operations and therapeutics

There is need to build Health service delivery networks for large increases in the number of patients with suspected or confirmed COVID-19 cases at local, sub-national and national levels. In all health facilities staff should be familiar with the suspected COVID-19 case definitions and must be able to deliver the appropriate care pathway; ensuring that patients with, or at risk of, severe illness are treated and/or referred immediately. In ensuring safety of other patients, a high volume of covid-19 cases will put staff, facilities and supplies under pressure. A COVID-19 referral pathway that designates appropriate care settings for mild COVID-19 patients may allow for care in the community, a facility for respiratory support, or at home. Guidance should be made available on how to manage mild cases in self-isolation, when appropriate.

The following (but not limited to) key activities will guide the WHO response in this pillar:

- Support case management capacity building efforts at regional, sub-regional and country levels through refresher and cascade training in collaboration with partners.
- Coordinate partners support to conduct surveys including capacity building for clinical trials studies at Regional, Sub-region and Country levels.

- Deploy emergency medical surge response teams to countries with the deepest capacity gaps.
- Provide technical supportive supervision, quality assurance and monitoring and evaluation on case management activities in countries.
- Provide capacity building on critical care in selected countries based on capacity gaps.
- Dissemination of new guidelines through virtual and onsite platforms.
- Develop and working with academic partners and critical care specialists in providing on demand support to country teams.
- Support countries in adopting the WHO Global Clinical Data Platform through training of facility and country data managers.
- Support countries and partners in conducting research on COVID-19 therapeutics.
- Support countries in setting up POST COVID-19 clinics with aim to document and publish key findings.

Pillar 08: Operational support and logistics, and supply chains

At country level logistical arrangements to support incident management and operations needs to be reviewed. Expedited procedures may be required in key areas such as surge human resources deployments, procurement of essential supplies and contractor payments. Due to acute supply shortages, the COVID-19 supply chain system (CSCS) has been established to provide countries with essential supplies for their COVID-19 response. This platform also should be used to address supply challenges for maintaining essential services where relevant, to allow equitable allocation between all health care providers when supply shortages arise. The CSCS is led by the Supply Chain Task Force, which is co-chaired by WHO and WFP. The CSCS will facilitate the identification, certification, sourcing, allocation and delivery of essential supplies to where they are needed most.

The following (but not limited to) key activities will guide the WHO response in this pillar:

- Support to establish and sustain a system for monitoring stock of essential medical supplies to ensure timely procurement and delivery.
- Conduct assessments of the logistics capacity and management systems and supporting countries to develop a logistic safety plan.
- Support countries to update Health Sector Supply Chain Strategy and Implementation of the Action Plan.
- Train personnel on cold chain maintenance.
- Build the capacity of OSL teams at national and subnational levels.
- Design and introducing inventory tracking system to ensure end-to-end tracking of wide-ranging commodities.
- Train logisticians at national and sub-national levels in logistics management using electronic solutions.

Pillar 09: Strengthening essential health services and systems

When health systems are overwhelmed, both direct mortality from an outbreak and indirect mortality from preventable and treatable conditions increase dramatically. Countries will need to make difficult decisions to balance the demands of responding directly to COVID-19, while simultaneously engaging in strategic and coordinated action to maintain essential health service delivery, mitigating the risk of system compromise.

Adaptations and lessons learned should be identified in order to contribute longer term resilience and progress toward universal health coverage (UHC). This also presents an opportunity to see how emergency response management approaches within service delivery can be sustained to protect progress of UHC from shocks. Regular monitoring of availability, access barriers and use of health services

at all levels of care, as well as gaps and health outcomes among communities should guide programming decisions and priorities. This plan proposes to support the use and analysis of DHIS2, real-time Health facility data and integrated social sciences evidence to understand differential trends in health services use and health outcomes as outlined in the COVID-19-operational guidance for maintaining health services during an outbreak.

The selection of essential health services will be guided by the health system's baseline capacity and burden of disease, the socio-economic conditions of the communities and the COVID-19 transmission context. High priority categories for continuity include preventing and treating communicable diseases (malaria, tuberculosis, HIV etc), averting maternal and child morbidity and mortality, preventing acute exacerbations of chronic conditions by maintaining established treatment regimens, continuity of critical inpatient therapies and managing emergency conditions requiring time-sensitive intervention, just to name a few.

Plans to provide business continuity and provision of other essential healthcare services should be reviewed and adapted. Special considerations and programs should be implemented for vulnerable populations and fragile, conflict and violence and humanitarian settings.

The following (but not limited to) key activities will guide the WHO response in this pillar:

- Support countries to develop/review and update their Country Health Service Continuity (HSC) strategic plans to address the gaps occasioned by evolving epi situations.
- Provide technical support to countries in the implementation of their National HSC strategic plans.
- Conduct a capacity assessment in 47 countries and map the identified needs to inform RGO country support.
- Sustain and strengthen the real-time monitoring of Health service continuity in countries and establish a protocol for investigating and addressing identified disruptions.
- Training and capacity building for national and sub-national level health managers and Health care workers for the implementation of their plans.
- Support countries to resume new vaccine introduction and supplemental immunization activities that have been postponed due to COVID-19
- Provide support to countries to develop program specific strategies to strengthen Health Services and core program activities based on countries priority and emergent trends (Mental health, RMNCH, Nutrition etc.).
- Support countries to improve immunization data quality and use for decision making with the implementation of program reviews, data quality review and capability building interventions
- Strengthen country medicine and medical product supply chain.
- Establish/Strengthen country policy for health workforce protection in the context of emergencies.

Pillar 10: Vaccination

As COVID-19 vaccines receive approval through the WHO prequalification process (and/or Emergency Use Listing) and National Regulatory Authorities (NRAs), countries will need to be prepared for their introduction and deployment. This will involve early planning, regulation, communication, training, logistics, legal, infrastructure, operations and other areas to successfully and distribute the vaccines in a timely and efficient manner. This process should be based on WHO's fair and equitable access and allocation framework and follow guidance issued by the WHO Strategic Advisory Group of Experts on Immunization (SAGE).

Countries will be supported to develop end-to-end COVID-19 Vaccine National Deployment and Vaccination Plans based on the Vaccine Introduction Readiness Assessment Tool to monitor the progress of implementation. This preparation process will include technical assistance from WHO in order to ensure a safe, and effective deployment.

Successful implementation of mass vaccination campaigns is challenging in fragile settings and coverage, based on experience, may be less than optimal.

The following key activities will guide the WHO response in this pillar:

- Support NRAs to ensure expedited registration of vaccines, quality assurance and safety monitoring of COVID-19 vaccines.
- Support country decision making for equitable vaccine delivery and implementation in alignment with the values framework established by SAGE and the Regional Immunization Technical Advisory Group.
- Ensure country preparedness for deployment and vaccination, including target population definition and financing mechanisms.
- Provide technical support for monitoring and evaluating of the vaccine deployment and the impact of vaccination.
- Ensure the rapid deployment of vaccine and associated supplies/equipment in the right condition, right quantities and the right place.
- Develop/adapt monitoring and evaluation tools for vaccination progress and documentation.
- Adapt/develop and/or /translate regional tools to assess country vaccine deployment readiness.
- Develop and disseminate guidelines for active surveillance of specific COVID-19 vaccine related adverse events.
- Support priority countries according to Epidemiological Maturity level in the planification process of COVID-19 vaccine introduction.
- Support countries in establishing or strengthening capacity for information management, risk communication and community engagement to ensure optimal uptake of COVID-19 vaccination by all targeted groups.

Pillar 11: Research, innovation and evidence

Countries are encouraged to align with sero-epidemiological standardized investigation protocols, branded as "UNITY Studies", which aims at increasing quality evidence-based knowledge for action. This initiative promotes the use of standardized epidemiological study designs and laboratory assays to inform response to transmission. All countries are encouraged to adopt the international WHO Research and Development Blueprint efforts and its protocols and use evidence-based knowledge for action.

The following (but not limited to) key activities will guide the WHO response in this pillar:

- Support training on innovation and leadership.
- Web development innovation marketplace platform for COVID-19.
- Support countries to conduct studies on various key COVID-19-related issues
- Strengthen human capacity for research and development in Traditional Medicine and registration of herbal medicines (Publication of research and development of protocols identified by the Regional Expert Advisory Committee on Traditional Medicine for COVID 19 Response; Establishment of a data and safety monitoring board for COVID-19 traditional medicines).
- Supporting the Functioning of the Regional Expert Advisory Committee on Traditional Medicine for COVID-19 Response. Support countries for COVID-19 and monitoring of 25 research institutions dedicated to research and development on traditional medicine on quality assurance.
- Support countries to assess the effectiveness of monitoring of COVID-19 patients on home-based isolation and care, to identify gaps in and determine the efficiency of the home-based care.

- Support countries to conduct operational research -in order to understand the relationship between a patient’s genomics and clinical outcome. This will lead to improved guidance on clinical management.
- Document best practices in local manufacture of PPE.
- Ensure medical product regulation continuity in health emergencies based on the COVID-19 experience.
- Address the problem of substandard and falsified medical products, whose incidence has been exacerbated by COVID-19.

MONITORING OF THE PLAN

The monitoring of this plan will reside on 26 key performance indicators (KPIs) outlined in Table 1 below. The systems for periodicity, collection and reporting will be established ensuring minimal deviations from existing data collection systems. Furthermore, building on lessons learnt in the implementation of the 2020 SPRP, an updated monitoring and evaluation framework of the response will be published alongside this SPRP.

Table 1: Key performance indicators for the monitoring of the plan

Indicator	Level of measurement	Target	Disaggregation	Frequency of reporting
Pillar 01: Coordination, planning, financing and monitoring				
Funds utilization rate of COVID19 Workplans	Output	90%	Response pillar	Weekly
Number of unique news articles quoting WHO spokespeople	Output	10 per week		Weekly
Pillar 02: Risk communication, community engagement (RCCE) and infodemic management				
Number of rumours/misinformation identified to which proper messaging was disseminated through outlets (TV, social media, community leaders etc.) the previous week	Process	TBA		Weekly
Number of people reached and engaged through social media platforms with COVID-19 messages targeting disinformation	Output	Reached: 10 million Engaged: 2 million		Monthly
Pillar 03: Surveillance, outbreak investigation and calibration of public health and social measures				
Percentage of health facilities with at least one health worker trained on IDSR including COVID-19 identification	Output	100%		Quarterly
COVID-19 incidence in the last 7 days	Output	< 20 per million population		Weekly
Case fatality ratio of confirmed cases reported during the last 7 days	Outcome	<1%		Weekly
Pillar 04: Points of entry, international travel and transport, and mass gatherings				
Percentage of designated points of entry with screening, isolation facilities and referral system for COVID-19	Process	100%		Monthly
Percentage of States Parties which, during the past three months, have made available to WHO, either through IHR NFP communication channels or via official government websites, up to date information about international travel-related measures, including additional health measures as stated in article 43 of the IHR (2005), as well as their public health rationale and the risk assessment elements on which this rationale is based	output	100%		Quarterly
Pillar 05: Laboratories and diagnostics				
Percentage of countries sharing specimens or virus isolates for sequencing at least once quarterly	Output	80%		Quarterly
Percentage of SARS-CoV-2 sequences with linked vaccination history	Output	75%		Quarterly
Percentage of laboratories enrolled in EQA for PCR detection of SARS CoV-2 meeting passing score	Output	90%		Annually

Indicator	Level of measurement	Target	Disaggregation	Frequency of reporting
Pillar 06: Infection prevention and control and protection of the health workforce				
Percentage of health workers trained in IPC	Output	100%		Monthly
Percentage of priority health care facilities with isolation capacity	Output	100%		Monthly
Pillar 07: Case management, clinical operations and therapeutics				
Bed occupancy rate for confirmed cases at present	Outcome	<5%		Weekly
Pillar 08: Operational support and logistics, and supply chains				
Percentage of countries with no stockouts of PPEs, testing kits or medical equipment	Output	100%		Monthly
Pillar 09: Strengthening essential health services and systems				
Percentage of change in number of surviving infants receiving their first dose of measles vaccine compared to 2019	Outcome	0%	Sub-national level	Monthly
Percentage of change in number of outpatient consultation compared to 2019	Outcome	0%	Sub-national level	Monthly
Pillar 10: Vaccination				
Percentage of countries that rolled-out COVID-19 Vaccine	Output	100%		Monthly
Percentage of targeted population fully vaccinated	Output	80%	Age, sex, priority population	Monthly
Pillar 11: Research, innovation and evidence				
Number of studies (Early investigations or Research on priority questions) conducted on COVID-19	Output	TBA		Quarterly
Number of innovations for COVID-19 used in the country	Output	TBA		Quarterly

RESOURCE REQUIREMENTS

The WHO in the African Region used a bottom-up approach for the operational planning that fed into the COVID-19 Regional and Global SPRP for the year 2021. All WHO country offices and the Regional Office Incident Management System Team (IMST) defined their needs in terms of staffing [WHO internal staff and other expertise (consultants, Special Services Agreements, United Nations Volunteers)], procurement and activities including those to be implemented with partners' support especially in humanitarian settings. With most of the activities of the regular work of WHO for the biennium 2020-2021 affected with the COVID-19 pandemic, and following the SPRP and organization-wide review of June 2020, activities that were part of the approved 2020-21 workplans, that have been adjusted/refocused to also include COVID were included in the SPRP for 2021 but will be charged to the base segment of WHO budget.

The overall budget required to implement the SPRP in the WHO African Region is estimated at US\$ 525,408,921 of which US\$ 416,494,255 is distributed to the 47 WHO Country Offices and US\$ 108,914,666 to the Regional Office, while US\$ 81,035,973 is allocated to the base segment and US\$ 444,372,948 to the specific response to the crisis. Operational costs for planned vaccination under COVAX facility using 3% of the population and US\$1.28 per person targeted⁷ are estimated at US\$ 43,251,721. The capacity required for detecting new variants and sequencing under Pillar 05 (Laboratories and diagnostics) amount to US\$ 37,651,396 and will be managed by the Regional Office to strengthen the work of national laboratories with the 12 Regional Laboratories identified for sequencing. The increased budget by around US\$84.4 million compared to the Region's Budget of US\$ 441 million communicated during the Global Appeal of 18 February 2021 takes into account COVAX vaccination operational costs not covered under the facility and the sequencing surveillance not captured then, and representing 51.2% and 44.6% respectively of the augmented portion; while the other 4.2% covers infodemic management, traditional medicine research, strengthening of pharmaceutical services, mental health and psychosocial support and additional human resources. Detailed budget by Pillar (**P01**: Coordination, planning, financing and monitoring; **P02**: Risk communication, community engagement (RCCE) and infodemic management; **P03**: Surveillance, outbreak investigation and calibration of public health and social measures; **P04**: Points of entry, international travel and transport, and mass gatherings; **P05**: Laboratories and diagnostics; **P06**: Infection prevention and control and protection of the health workforce; **P07**: Case management, clinical operations and therapeutics; **P08**: Operational support and logistics, and supply chains; **P09**: Strengthening essential health services and systems; **P10**: Vaccination; and **P11**: Research, innovation and evidence), WHO Country Office and Regional is presented in Table 2 below.

⁷ Reasonable Benchmark figure based on findings from a systematic review (see <http://immunizationeconomics.org/ican-idcc-findings#anchor-top>) that used a median financial cost of USD1.98 per person targeted (HPV vaccine) as proxy. The remaining US\$0.70 per person targeted operational costs will be covered by countries themselves either through their national budget, the "free" component from COVAX or additional doses to be paid for through facilities from the World Bank and African Development Bank.

Table 2: WHO African Region Resource Requirements by COVID-19 Response Pillar and Organization Level

Level of the Organization	Response Pillar											TOTAL
	P01	P02	P03	P04	P05	P06	P07	P08	P09	P10	P11	
WHO African Region	36,902,791	26,871,866	79,101,777	14,921,136	89,596,032	45,732,083	47,927,686	44,235,767	30,938,613	88,913,702	20,267,470	525,408,921
Regional Office	12,027,272	3,087,191	11,225,197	2,446,061	39,681,398	2,691,882	5,310,157	3,990,500	4,924,550	14,830,611	8,699,847	108,914,666
All WHO Country Offices	24,875,519	23,784,675	67,876,580	12,475,075	49,914,634	43,040,201	42,617,529	40,245,267	26,014,063	74,083,091	11,567,623	416,494,255
Algeria	279,496	252,500	265,120	78,120	315,000	440,000	18,120	493,158	428,750	2,048,278	219,250	4,837,792
Angola	425,885	719,008	1,373,923	707,844	1,517,728	868,622	1,217,824	588,008	647,218	1,529,107	233,004	9,828,171
Benin	637,813	469,328	935,210	200,000	215,000	790,000	620,000	441,685	281,202	1,054,723	780,000	6,424,961
Botswana	219,979	39,872	769,180	10,000	451,950	114,827	421,616	590,894	100,909	342,054		3,061,281
Burkina Faso	1,148,124	414,624	1,328,124	862,504	1,238,000	884,900	674,694	906,924	756,132	1,298,244	325,000	9,837,270
Burundi	860,329	757,424	1,106,320	55,000	1,196,120	1,250,008	299,101	525,890	1,252,043	1,422,063	1,395,202	10,119,499
Cabo Verde	80,000	52,880	320,124	124,000	541,250	60,000	34,880	230,616	448,878	257,827	42,240	2,192,695
Cameroon	480,900	194,117	3,444,834	309,325	900,592	1,219,520	1,100,662	389,790	1,105,125	2,038,444	246,450	11,429,760
Central African Republic	707,194	808,938	1,360,820	274,400	1,390,400	867,870	1,315,404	1,487,058	1,148,521	1,438,499		10,799,103
Chad	42,438	278,224	1,849,204	95,000	530,000	2,104,000	1,151,496	1,013,508				7,063,870
Comoros	69,300	201,996	613,838	44,500	331,900	363,329	202,000	324,630	200,000	492,367	45,000	2,888,860
Congo	286,792	206,735	831,296	78,408	843,104	867,384	924,870	165,962	550,786			4,755,337
Côte d'Ivoire	159,444	258,145	1,318,963	345,128	227,248	182,974	351,756	534,805	457,256	1,770,165	417,256	6,023,140
Democratic Republic of the Congo	1,360,214	611,440	4,463,202	858,871	2,546,844	2,423,698	1,380,672	4,658,426	2,259,671	6,789,835	891,560	28,244,433
Equatorial Guinea	812,519	458,000	313,380	80,000	832,626	385,380	312,000	1,036,588	130,000	269,056	75,000	4,704,549
Eritrea	40,625	126,040	22,632			536,841	75,000	134,508	1,254,925	310,717	52,632	2,553,920
Eswatini	235,076	188,944	858,703	270,290	1,028,380	857,248	913,660	356,384	225,752	370,019	100,000	5,404,456
Ethiopia	1,124,516	1,383,128	5,504,159	780,504	1,668,200	2,140,853	3,388,556	2,457,138	1,913,284	6,235,215		26,595,553
Gabon	848,313	465,248	1,346,240	71,872	438,000	553,438	316,432	698,748	214,376	849,382	100,000	5,902,048
Gambia	378,200	176,300	575,500	154,690	454,400	148,304	401,950	165,576	279,251	521,627	82,000	3,337,798
Ghana	122,744	354,000	758,874	450,000	1,423,000	710,000	1,362,000	414,120	240,744	1,691,514	255,000	7,781,996
Guinea	226,003	276,435	1,475,747	153,652	374,152	606,956	360,477	1,507,263	458,904	860,046	133,500	6,433,135
Guinea-Bissau	249,372	242,000	302,814	95,000	102,750	419,851	1,702,486	397,054	162,514	224,395	50,000	3,948,236

Level of the Organization	Response Pillar											TOTAL
	P01	P02	P03	P04	P05	P06	P07	P08	P09	P10	P11	
Kenya	824,890	1,512,000	1,338,900	60,500	2,026,912	908,350	1,799,495	770,344	300,000	2,651,451		12,192,842
Lesotho	447,504	161,000	577,134	142,000	1,701,700	874,956	447,914	812,736	510,958	237,909	48,500	5,962,311
Liberia	94,626	115,328	686,874		324,206	314,212	177,578	427,782	320,000	332,318	180,000	2,972,924
Madagascar	690,931	446,506	1,784,570	262,000	2,012,117	2,105,039	950,087	1,444,654	943,278	1,737,349	113,154	12,489,686
Malawi	126,000	266,500	447,757	450,500	1,102,500	550,222	1,049,204	168,000	326,600	1,606,095	108,626	6,202,003
Mali	646,757	607,438	2,063,362	172,000	1,360,329	860,677	1,264,971	420,988	1,719,956	970,899		10,087,377
Mauritania	180,126	42,002	2,402,244	10,000	252,322	2,734,780	59,400	251,434	40,000	253,365		6,225,672
Mauritius	8,000	103,748	22,500	22,500	1,339,750	509,370	459,651	655,819	124,346	459,650		3,705,334
Mozambique	447,000	270,000	1,077,340	430,252	848,744	578,996	670,252	417,418	169,624	1,595,061	150,000	6,654,687
Namibia	624,136	508,139	2,023,975	539,409	511,933	518,962	542,312	301,691	110,000	579,644	89,087	6,349,288
Niger	1,391,820	342,172	1,535,409		191,000	349,910	224,000	3,503,788	46,500	1,097,656	171,820	8,854,075
Nigeria	1,388,108	2,908,955	9,482,682	1,034,638	3,162,828	2,550,472	1,606,483	2,648,680	502,996	9,237,787	221,843	34,745,472
Rwanda	347,180	605,219	525,208		1,738,835	861,455	500,297	1,206,829	1,790,686	886,372	221,172	8,683,253
Sao Tome and Principe	151,562	686,930	1,223,255	50,000	1,030,930	318,375	101,534	282,571	210,552	837,189	80,000	4,972,899
Senegal	260,249	228,040	612,108	288,896	406,686	409,144	735,882	709,901	151,876	872,953	134,375	4,810,111
Seychelles	192,377	89,000	194,929	76,385	221,385	423,630	100,000	471,500	191,514	73,970		2,034,691
Sierra Leone	550,162	701,064	1,329,852	404,440	719,590	1,585,245	664,798	542,810	1,623,987	643,704	300,325	9,065,977
South Africa	490,325	470,456	1,504,349	102,000	598,996	677,893	331,297	415,926	628,100	2,902,925	102,000	8,224,266
South Sudan	1,732,418	479,252	1,693,480	972,504	1,674,292	258,166	2,702,368	1,661,788	596,296	4,311,935	3,399,240	19,481,739
Togo	563,188	428,742	534,660	429,393	2,287,722	322,062	1,313,674	577,972	232,494	885,781	285,000	7,860,688
Uganda	1,703,984	2,020,124	1,585,048	133,350	2,890,064	1,547,846	2,483,798	578,125	184,800	4,440,744	87,000	17,654,882
United Republic of Tanzania	575,975	1,004,721	1,797,456	508,097	1,549,272	1,345,696	1,288,405	1,393,400	416,496	2,757,540	185,000	12,822,058
Zambia	78,687	359,208	1,224,437	188,913	2,900,000	1,727,875	1,812,044	208,578	228,770	1,159,428	145,167	10,033,108
Zimbabwe	564,239	492,805	1,070,844	98,189	495,876	1,910,867	2,786,429	853,800	127,994	1,737,790	102,220	10,241,053