

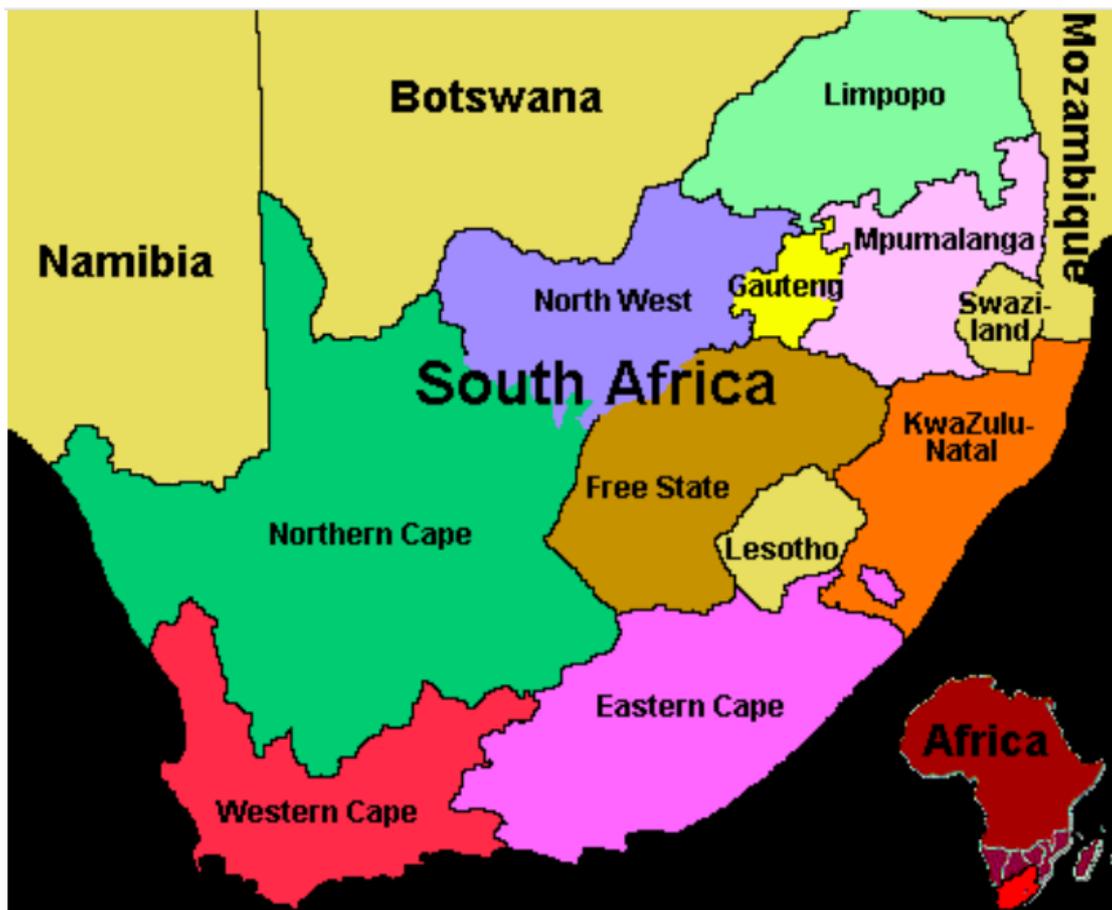


health

Department:
Health
REPUBLIC OF SOUTH AFRICA

Preparedness and Response Plan

Novel Coronavirus



February 2020

Republic of South Africa

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Acronyms

ABHR	Alcohol Based Hand Rub
AFRO	Africa Regional Office, WHO
CDC	Centers for Disease Control and Prevention
CFR	Case Fatality Rate
CHAI	Clinton Health Access Initiative
COVID-19	Coronavirus Disease 2019
COGTA	Cooperative Governance and Traditional Affairs
CSO	Community Services Organization
DHET	Department of Higher Education and Training
DIRCO	Department of International Relations and Cooperation
DoHA	Department of Home Affairs
DoT	Department of Transport
EOC	Emergency Operations Centre
EMS	Emergency Medical Services
HCW	Health Care Worker
HR	Human Resources
IEC	Information, Education and Communication
IHR	International Health Regulations
IM	Incident Manager
IMS	Incident Management System
IMT	Incident Management Team
IPC	Infection Prevention and Control
KAP/B	Knowledge, Attitude, Practice and Behaviour
MERS-CoV	Middle East Respiratory Syndrome Coronavirus
MNORT	Multisectoral National Outbreak Response Team
NATJOC	National Joint Operations Centre
NMDC	National Disaster Management Committee
NDoH	National Department of Health
NHLS	National Health Laboratory Services
NICD	National Institute for Communicable Diseases
NGO	Nongovernmental Organization
PHEIC	Public Health Emergency of International Concern
RCCE	Risk Communication and Community Engagement
RRT	Rapid Response Team
SARI	Severe Acute Respiration Infection
SARS-CoV	Severe Acute Respiratory Syndrome Coronavirus
SARS-CoV-2	Severe Acute Respiratory Syndrome Coronavirus 2
SOPs	Standard Operating Procedures
ToR	Terms of Reference
TV	Television
UN	United Nations
WHO	World Health Organization

Introduction

On 31 December 2019, the World Health Organization (WHO) China Country Office was informed of cases of pneumonia of unknown cause detected in Wuhan City, Hubei Province of China. On 7 January 2020, the causative pathogen was identified as a novel coronavirus (COVID-19). The majority of these cases were linked to a seafood, poultry and live wildlife market in Wuhan City, suggesting that the novel coronavirus has a possible animal origin. According to WHO, as of 10 February 2020, 40,555 cases of COVID-19 with 910 deaths have been reported globally; 40,235 cases and 909 deaths were reported in China; 319 cases were reported from outside China (in 24 countries). The number of cases reported continue to rise majority of them (99%) being in China. No confirmed cases have been reported on the African continent. The incubation period is currently estimated to be up to 14 days.

Coronaviruses belong to a large family of viruses causing a wide spectrum of illness, ranging from very mild to severe. Some cause illness in people; numerous other coronaviruses circulate among animals, including camels and some bat species. Rarely, some animal coronaviruses can evolve to cause illness in people. Sometimes coronaviruses may develop the ability to spread from person to person, for example the Middle East respiratory syndrome coronavirus (MERS-CoV), first reported from Saudi Arabia in 2012, and the severe acute respiratory syndrome coronavirus (SARS-CoV), first recognized in China in 2002.

Following the second meeting of WHO Emergency Committee on COVID - 19 outbreak in the People's Republic of China, held on 30 January 2020 by the WHO Director-General under the International Health Regulations (IHR2005), WHO classified the event as a Public Health Emergency of International Concern (PHEIC). Global coordination and joint efforts to control the outbreak were therefore signalled. It is expected that further international exportation of cases may appear in any country. Thus, all countries were advised to be prepared for containment, including active surveillance, early detection, isolation and case management, contact tracing and prevention of onward spread of COVID-19 infection. Particular emphasis is to be placed on reducing human infection, prevention of secondary transmission and international spread, and contributing to the international response through multi-sectoral communication and collaboration and active participation in increasing knowledge on the virus and the disease.

As infected travellers may appear in any country (to date, cases have been reported in Japan, Republic of Korea, Vietnam, Singapore, Australia, Malaysia, Cambodia, Thailand, Nepal, Sri Lanka, USA, Canada, France, Germany, United Arab Emirates, Hong Kong, Taiwan, Macau, UK, Sweden, Spain, Finland, Russian Federation and Belgium) the committee recommended that all countries should be prepared for containment, including active surveillance, early detection, isolation and case management, contact tracing and prevention of onward spread of COVID-19 infection, and to share full data with WHO.

Background

South Africa is one of the countries in the region with commercial hubs linking China with the rest of the continent through multiple flights plying the routes. Johannesburg, Port Elizabeth

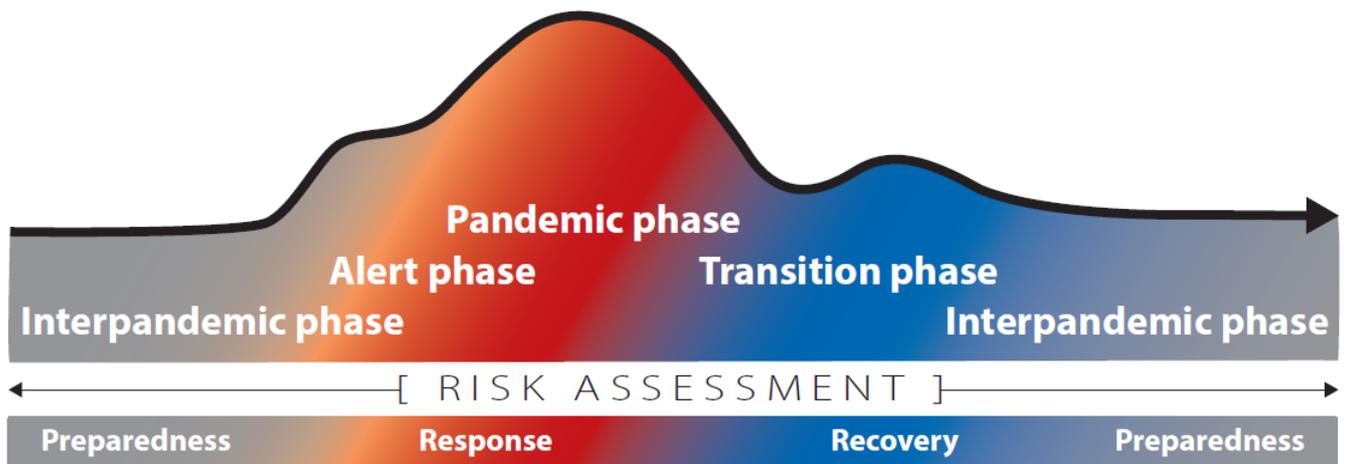
Durban and Cape Town airports are the key points of entry for international flights. Land crossings with neighboring countries are also being assessed for the risk of importation of cases. There are five neighbouring countries to South Africa: Botswana, Eswatini, Mozambique, Namibia and Zimbabwe, while Lesotho is land-locked within South Africa. These countries are also important because of threats of cross-border transmission and the opportunities for cross-border collaboration to tackle the diseases. Mpumalanga, Limpopo, and Free State provinces have been classified as priority for preparedness due to exposure to international traffic and level of preparedness. These include Lebombo Land Border, Beit Bridge Land Border, Maseru Bridge Land Border and Ficksburg Land Border.

After a risk assessment of novel coronavirus situation conducted by WHO, the risk for global spread was deemed high. The WHO regional office for Africa (AFRO) subsequently classified South Africa as priority one country based on the traffic between China and the country and taking into consideration IHR capacities. As of 10 February 2020, no confirmed case of COVID-19 have been reported in South Africa. The National Institute for Communicable Diseases (NICD) is closely monitoring the situation and will test patients that satisfy the criteria for suspected cases, bearing in mind that it is influenza season in the northern hemisphere and the expected respiratory tract infections are common.

Following the declaration of a COVID-19 as a PHEIC, the country has undertaken readiness measures to ensure detection, referral and management of cases. The national EOC and incident management system have been activated. The national reference laboratory at NICD has capacity to confirm cases. The lab is also supporting a number of countries in the region to analyze samples. A case definition specific to the South African context has been adopted and disseminated to key actors for use. Screening at points of entry of travelers from affected countries is ongoing. A number of trainings have been undertaken including surveillance, case management, IPC, laboratory, EMS among others. Guidelines and SOPs have been developed and shared with stakeholders and are available on the NICD website. The procurement of contingency supplies is underway. 300 noninvasive thermometers have been acquired and are in use at various points of entry.

The preparedness plan for South Africa will build on the Pandemic Influenza Preparedness whilst adhering to the WHO recommended phases.

Figure 1: The continuum of pandemic phases



The 5 WHO global pandemic phases are highlighted below;

<i>Interpandemic</i>	<i>This is the period between influenza pandemics.</i>	RISK ASSESSMENT
<i>Alert</i>	<i>This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national and global levels, are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur.</i>	
<i>Pandemic</i>	<i>This is the period of global spread of human influenza caused by a new subtype based on global surveillance. Movement between the interpandemic, alert and pandemic phases may occur quickly or gradually as indicated by the global risk assessment, principally based on virological, epidemiological and clinical data.</i>	
<i>Transition</i>	<i>As the assessed global risk reduces, de-escalation of global actions may occur, and reduction in response activities or movement towards recovery actions by countries may be appropriate, according to their own risk assessments.</i>	
<i>Interpandemic</i>	<i>This is the period between influenza pandemics.</i>	

Purpose

This is to ensure comprehensive preparedness and readiness to tackle any imported novel coronavirus cases, provide a timely response and containment based on national and international standards and norms. The document will facilitate the work of all actors engaged in preparedness in South Africa including governmental departments, Nongovernmental organizations (NGOs) and the United Nations (UN) bodies.

Scope

This is a multi-disciplinary plan encompassing critical aspects of preparedness in the country. The major areas of focus include capacity building and identifying teams to support coordination, surveillance, laboratory, case management, IPC, risk communication, and emergency medical services. The necessary supplies for contingency stocks and current use are also outlined in the document. Actions envisaged at national level will be cascaded to high

risk provinces. The required resources are highlighted. The plan will be for six months initially then review as required.

Goals and objectives

Goal: Strengthen national and subnational capacity for timely detection, management and containment of the spread of COVID-19.

Specific objectives:

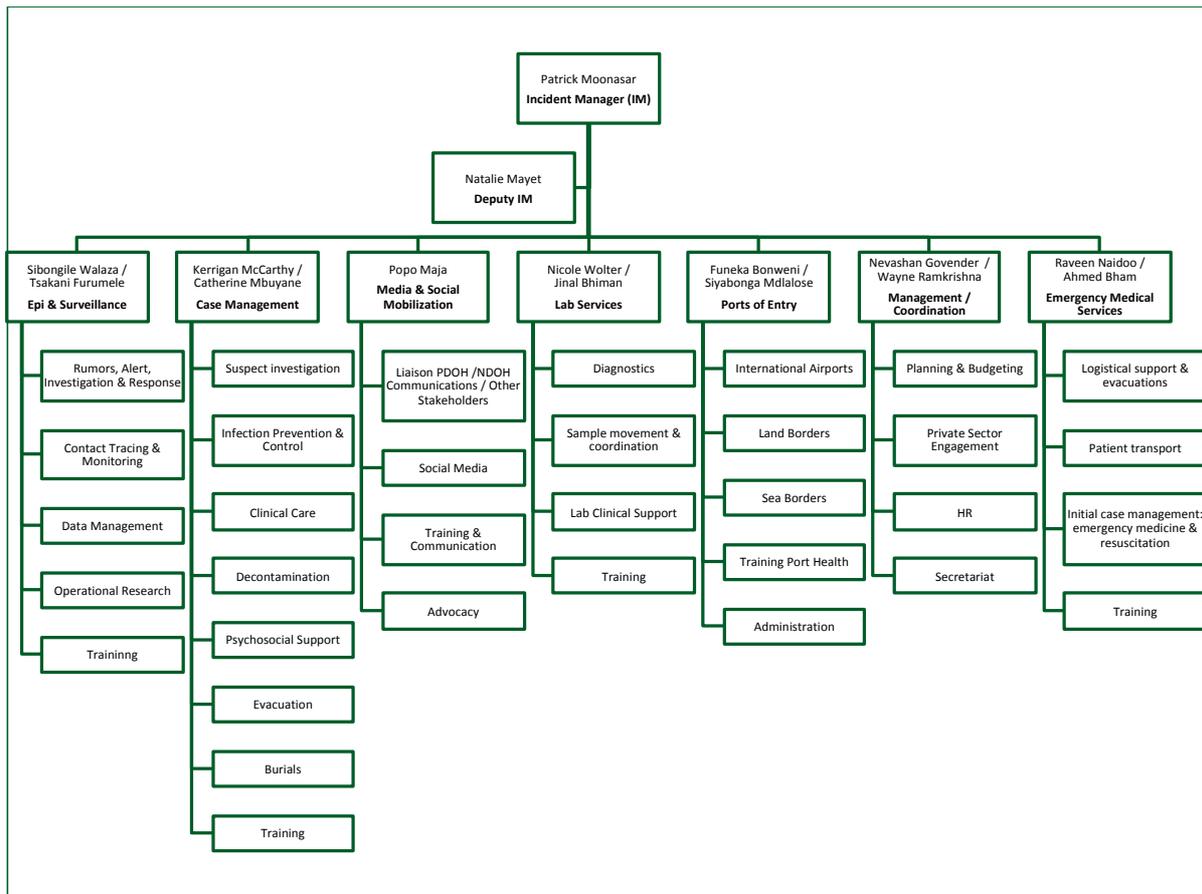
1. Establish/Strengthen multisectoral coordination at both national and subnational levels including identification of needs and procurement of required supplies.
2. Strengthen capacity to undertake surveillance for COVID-19 at national and subnational levels
3. Ensure that the health care system is prepared to receive, manage and report on the clinical progress of persons with COVID-19 in such a way as to minimise the risk to health care workers and maximise good patient outcomes
4. Strengthen/maintain NHLS laboratory capacity to support testing for SARS-CoV-2
5. Capacitate emergency medical services to respond to reported cases
6. Establish and maintain screening capacity at key points of entry
7. Continuously inform the public on the Public Health risks of Coronavirus (COVID-19) and the related mitigation measures in various settings through (RCCE)
8. Provide operational and logistics support to the preparedness and response teams.

Coordination of COVID-19 preparedness

Roles and Responsibilities

National

The overarching coordination body is the Multisectoral National Outbreak Response Team (MNORT). The MNORT has assigned the incident management team with specific tasks and objectives as laid out before. The incident management team is led by the National Department of Health (NDoH) with support from National Institute for Communicable Diseases (NICD), WHO, CDC and other partners. The EOC has been activated and incident management team set up as per the below structure. As part of coordination there are several other departments involved such as Department of Home Affairs (DoHA), Department of International Relations and Cooperation (DIRCO) and Department of Transport (DoT).



Provincial

Coordination structures at national level will be cascaded to the provincial level through the multi-sectoral, multi-disciplinary provincial outbreak response teams which is in turn cascaded to district and sub-district levels.

Partners

Multiple sectors and partners are engaged in the COVID-19 preparedness and response framework for South Africa led by the National Department of Health. In addition to the above, Cooperative Governance and Traditional Affairs (COGTA), Department of Safety and Security, National Joint Operations Center (NATJOC) among others. Key nongovernmental partners include WHO, CHAI, CDC, Red Cross, and the private sector

Preparedness activities per functional area

Functional area	Subobjective	Activities	Indicators	Targets
1. Establish multisectoral coordination at both national and subnational levels for strategic discussions				
Coordination	<i>1.1 Coordinate multisectoral partners in preparedness</i>	<i>Develop and disseminate the national coronavirus preparedness plan</i>		
		<i>Conduct mapping of key stakeholders in the preparedness and response action</i>	<i>Availability of list of partners with roles, responsibilities and duration of support spelt out.</i>	<i>Updated monthly</i>
		<i>Convene regular stakeholder meetings including IMT and MNORT for strategic discussions and guidance</i>	<i>Number of meetings held</i>	<i>At least once a week for the IMT and once a month for MNORT</i>
		<i>Coordinate and ensure training is undertaken according to national standards</i>	<i>Number of trainings</i>	<i>Nine provinces conduct training</i>
	<i>1.2 Create a mechanism for information sharing with key stakeholders including the public</i>	<i>Activate the national EOC to support smooth running of the operations</i>	<i>EOC operational</i>	<i>Daily operations</i>
		<i>Set up of hotlines for the public and health teams to report suspected cases or rumours.</i>	<i>Number of hotlines available</i>	<i>Two lines activated</i>
		<i>Produce regular sitrep</i>	<i>Daily sitrep for internal and weekly for external</i>	<i>Daily</i>
	<i>1.3 Carry out resource mobilization to implement the planned activities.</i>	<i>Map financial partners and their areas of interest</i>	<i>Proportion received compared to the planned.</i>	<i>80%</i>
		<i>Articulate needs and gaps to financial partners</i>	<i>Updates to partners</i>	<i>Weekly</i>
	<i>1.4 Identify gaps and ensure logistical, admin and financial support is provided.</i>	<i>Develop and review stock availability and gaps at national and subnational levels</i>	<i>Stock inventory</i>	<i>Weekly</i>
		<i>Review human resources needs and advocate to fill</i>	<i>Proportion of required posts filled</i>	<i>80%</i>
		<i>Support and facilitate procurement process as indicated in the procurement plan</i>	<i>Details in annex 2</i>	<i>90% of required stocks available</i>
	<i>1.5 Ensure national policy and guidelines including checklists on coronavirus are disseminated and utilized</i>			

	1.6 Provide support to provinces for preparedness and response through IMS structure	Roll out IMS structures to provincial level	Number of provinces implementing IMS	9 (100%)
		Conduct support supervision	Number of provinces receiving support supervision from national level	9(100%)
2. Strengthen capacity to undertake surveillance for COVID-19 at national and subnational levels				
Epi and Surveillance	2.1 Establish a surveillance and epidemiology group to support the main objective	Set up epidemiology and surveillance group and hold regular meetings	Number of meetings held	Weekly
		Ensure representation of EPI and surveillance at other cross cutting functions (e.g. clinical & IPC)	Number of meetings attended by EPI and surveillance representative/s	Weekly
			# of documents/ guidelines contributed to	
	2.2 Ensure that surveillance system is in place for early detection of suspected cases	Develop materials and guidelines to ensure early detection of suspected cases (case definitions, what to do and samples to collect)	#guidelines created & #updates of guidelines done	
			# of sites included in surveillance	
			# of sites trained	
	2.3 Ensure that systems are in place for early identification of contacts to limit further spread	Develop protocol and procedures for contact tracing	# of additional human resources added	
			# of guidelines developed and # of updates made	1 guideline develop with updates as required
			# meetings conducted/ contacts made	Weekly
	2.4 Ensure that systems are in place for monitoring and follow-up of cases and contacts	Provide training for teams involved in contact tracing	# and type of trainings conducted	1 training for each team with regular updates a required
Develop protocol and procedures for following-up suspected cases and contacts			# of guidelines developed and # of updates made	1 guideline developed with regular updates as required
	Provide training material/training for teams involved in follow-up	# and type of trainings conducted	1 training performed for each	

				<i>group, with refresher training as need arises</i>
		<i>Develop data collection tools for suspected cases and contacts</i>	<i># tools developed and updates</i>	<i>1 tool developed for each section developed with regular updates as required (Case investigation form, laboratory submission form, contact linelist etc)</i>
<i>2.5 Establish data management processes to ensure accurate data collection, capturing, storage and analysis</i>		<i>Develop databases to capture cases screened, suspected cases and contacts followed -up</i>	<i># databases developed</i>	<i>4 databases developed (screening, lab, suspected cases, contacts)</i>
		<i>Develop guidelines/procedures for data capturing and management</i>	<i># guidelines developed and # updated</i>	<i>1 guideline for data capturing with regular updates as required</i>
		<i>Develop indicators for reporting screening and contact follow-up</i>	<i># of indicators developed</i>	
		<i>Report on suspected cases and contact tracing indicators</i>	<i># of reports circulated /published</i>	<i>Daily reports</i>
		<i>Ensure adequate resources are available for data capturing and management</i>	<i># human resources for data entry are set up</i>	<i>15 staff members for contact tracing, 2 staff for following up with clinicians and data cleaning, 1 person for admin support</i>
			<i># supplies and equipment</i>	<i>17 Tablets/ computers. 1000 digital thermometers</i>
<i>2.6. Conduct operational research</i>		<i>Develop and implement protocol on SARS-CoV2 shedding</i>	<i>Protocol developed</i>	<i>1 protocol developed and</i>

				<i>submitted to ethics by end Feb</i>
			<i>Data collection tools developed</i>	<i>Tools developed</i>
			<i>Ethics approvals obtained</i>	<i>March 2020</i>
		<i>Develop and implement protocol on household transmission</i>	<i>Protocol developed</i>	<i>1 protocol developed and submitted to ethics by end Feb</i>
			<i>Data collection tools developed</i>	<i>Tools developed</i>
			<i>Ethics approvals obtained</i>	<i>March 2020</i>
3. Ensure that the health care system is prepared to receive, manage and report on the clinical progress of persons with COVID-19 in such a way as to minimise the risk to health care workers and maximise good patient outcomes.				
Case Management	<i>3.1 Identify key stakeholders to support the main objective and establish communication channels</i>	<i>Enlarge the core case management group to ensure representation from appropriate government departments, private sector and military</i>	<i># departments/sectors with representation and their names</i>	
		<i>Create a technical expert IPC group and meet at appropriate intervals</i>	<i># meetings convened with minutes circulated</i>	<i>Weekly</i>
		<i>Create a group of expert clinicians and meet at appropriate intervals</i>	<i># meetings convened with minutes circulated</i>	<i>Weekly</i>
		<i>Create a private sector facility group and meet at appropriate intervals</i>	<i># meetings convened with minutes circulated</i>	<i>Weekly</i>
		<i>Set up meetings with the 11 designated facilities and meet at appropriate intervals</i>	<i># meetings convened with minutes circulated</i>	<i>Weekly</i>
		<i>Set up regular meetings with provincial communicable disease co-ordinators and other appropriate provincial representatives</i>	<i># meetings convened with minutes circulated</i>	<i>Weekly</i>
	<i>3.2 Develop materials to support implementation of guidelines that support management of cases including IPC</i>	<i>Develop comprehensive guidelines and SOPs</i>	<i>#guide created & #updates of guideline done</i>	<i>Copy of guidelines</i>
		<i>Develop training slides</i>	<i>Availability of training slides</i>	<i>Copy of training slides</i>
		<i>Create training videos</i>	<i># videos done</i>	<i>Copy of videos</i>
<i>Create a facility readiness checklist</i>		<i>#checklist created</i>	<i>Copy of checklist</i>	

		<i>Develop guidance for IPC for specific sectors and situations (e.g. port health screeners, students returning from China)</i>	<i># guidance documents created</i>	<i>Copies of guidance documents availed</i>
		<i>Develop template district, facility pandemic preparedness plan</i>	<i>Proportion of provinces with preparedness plan</i>	<i>100%</i>
		<i>Develop template district, 72 hour response plan</i>	<i>Proportion of provinces with 72 hour response plan</i>	<i>100%</i>
	<i>3.3 Support facility, district and provincial preparedness activities including IPC readiness across the public and private sector</i>	<i>Ascertain readiness of 11 designated hospitals and identify key areas for strengthening</i>	<i>Assessment report</i>	<i>Copy of assessment report</i>
		<i>Identify PPE requirements for 11 designated hospitals</i>	<i>Proportion of designated hospitals with required PPE</i>	<i>100%</i>
		<i>Ensure all 11 hospitals have a pandemic preparedness plan</i>	<i>#hospitals with preparedness plan</i>	<i>11</i>
		<i>Identify capacity of 11 hospitals to isolate and ventilate SARI</i>	<i>#create a report with number of isolation and ventilation beds for SARI</i>	
		<i>Support weaker designated hospitals with telephonic guidance regarding readiness activities, and/or site visits</i>	<i># support calls to specific hospitals # support visits by national IMS to facilities to assess readiness</i>	<i>Copy of report</i>
		<i>Distribute facility checklist to provinces</i>	<i>Proportion of provinces with facility checklist</i>	<i>100%</i>
		<i>Create a database to enter facility checklists</i>	<i>#database created Y/N</i>	<i>Database established</i>
		<i>Assess completion of facility checklists in each province</i>	<i>Proportion of facilities completing facility readiness checklists.</i>	<i>100%</i>
		<i>Conduct assessment of priority health facilities to serve as isolation and treatment centres.</i>	<i>Assessment report</i>	<i>Copy of assessment report</i>
		<i>Conduct IPC and readiness assessments of priority health facilities to serve as isolation and treatment centres.</i>	<i>#facilities assessed by province</i>	
		<i>Ensure all provinces have a pandemic preparedness plan</i>	<i>Proportion of provinces with pandemic preparedness plan</i>	<i>100%</i>

		<i>Ensure all provinces have a 72 hour implementation plan post notification of first index case.</i>	<i>Proportion of provinces with 72 hr plan</i>	<i>100%</i>
<i>3.4 Support clinicians who will manage cases of confirmed COVID-19</i>		<i>Develop data collection tools for confirmed cases</i>	<i>#data collection tools created</i>	<i>Copies of data collection tools</i>
		<i>Develop a set of indicators that can be used to report cases of disease, clinical progress and outcome</i>	<i>#indicators created</i>	
		<i>Create or obtain a database to collect data from first Fx cases</i>	<i>Database created</i>	
		<i>Report on case indicators</i>	<i>Report on indicators above</i>	
		<i>Supervise data collection and management of cases</i>	<i>#database created #systems and human resources for data entry are set up</i>	<i>One database established</i>
		<i>Liaise with WHO regarding submission of case data</i>	<i>#calls with WHO clinical colleagues</i>	
		<i>Provide training to clinicians to manage confirmed case</i>	<i># of clinicians trained</i>	
		<i>Prepare for a clinical trial regarding HCW risk factors</i>	<i>#data collection tools created</i>	
		<i>Prepare for a clinical trial of a therapeutic intervention</i>		
		<i>Prepare for a clinical trial regarding a vaccination intervention</i>		
		<i>Prepare for a clinical trial regarding viral shedding</i>		
	<i>3.5 Ensure Infection Prevention and Control in high risk facilities and the public</i>		<i>Conduct assessment of health facilities for IPC status and plan to support accordingly</i>	<i>Proportion of facilities that have done assessments and have plan to support</i>
		<i>Provide training of trainers – and roll out the training to the high-risk provinces</i>	<i>Proportion of provinces with trained ToTs</i>	<i>100%</i>
		<i>Develop and disseminate guidelines and FAQ documents on IPC for all cadres of workers and for the public</i>	<i>#FAQ documents produced #IPC guidelines produced</i>	<i>Copy the FAQ and IPC guideline</i>

		<i>Enhance IPC in Isolation facilities in the 9 targeted provinces</i>	# of provinces with IPC in place	<i>9 provinces</i>
		<i>Conduct hygiene promotion campaigns for enhancing IPC practices at facilities and the public</i>	# of promotion campaigns done	
		<i>Support the safe management and disposal of medical waste</i>	Proportion of facilities with safe management and disposal of waste	<i>100%</i>
	<i>3.6 Strengthen the management and coordination of IPC activities across all levels of the health care system</i>	<i>Strengthen the National Level IPC Unit through a specific budgetary allocation</i>	<i>Budgetary allocation for the national IPC unit</i>	
		<i>Strengthen National IPC Technical Working Group (TWG) to continuously monitor and review the implementation of the strategy; and regularly update the IPC policy, strategic plan and guidelines</i>	<i>Availability of active national TWG</i>	
		<i>Strengthen IPC coordination units and TWGs through a specific budget allocation in all provinces to coordinate the roll-out of IPC interventions in the provinces</i>	<i># of provinces with Budgetary allocation for the IPC</i>	<i>9 provinces</i>
		<i>Capacity build facility level IPC focal persons to oversee the coordination of IPC activities at health facility</i>	<i># IPC focal persons trained on IPC at the health facilities</i>	
	<i>3.7 Strengthen policy, governance and regulatory structures and mechanisms for IPC</i>	<i>Develop, review and update, IPC frameworks relevant for the implementation of IPC at national and Province levels</i>	<i># of developed, reviewed and updated IPC frameworks for implementation of IPC at the national and provincial level</i>	<i>National and 9 provinces</i>
		<i>Harmonize the coordination mechanisms for the implementation of IPC frameworks from the national to the provinces</i>	<i>Availability of coordinated implementation of IPC framework from national to province level</i>	
		<i>Review and update the IPC guidelines and manual</i>	<i># of reviewed and updated guidelines and manual</i>	<i>Copies of the guidelines and manuals</i>
		<i>Strengthen IPC stakeholders' coordination mechanism at all levels of the health system</i>	<i># of IPC stakeholders fora held</i>	

		<i>Engage with private sector and explore opportunities for 'Public Private Partnership Initiatives' in support of IPC</i>	<i># of PPP engagements held to support IPC implementation</i>	
	<i>3.8 Establish training/capacity building strategies and programs for all healthcare workers on IPC</i>	<i>Work with all training institutions, professional and Regulatory bodies, Department of Higher Education and Training (DHET) and other stakeholders in the country to review and update their pre-service training curriculum with appropriate IPC curriculum</i>	<i>Availability of pre-service IPC training curriculum</i>	
		<i>Incorporate IPC into the in-service Curriculum for universities and other tertiary level training</i>	<i>Availability of in-service IPC training curriculum</i>	
		<i>Develop and establish a course and curriculum for IPC Specialists at Post-Graduate Diploma or master's degree</i>	<i>Availability of courses and curriculum for IPC at post graduate diploma and masters level</i>	
		<i>Adopt appropriate technologies that aid in capacity building of the HCWs e.g. certified online courses, Apps, Blogs, social media</i>	<i>Availability of certified online or mobile platform courses for IPC</i>	
	<i>3.9 Minimize risk of acquisition of hospital acquired infections for health care workers</i>	<i>Provide appropriate PPE for HCWs and monitor their use</i>	<i>Proportion of facilities with adequate PPEs (at minimum gloves, aprons and surgical masks)</i>	<i>100%</i>
		<i>Provide adequate hand washing facilities i.e. Alcohol Based Hand Run (ABHR) or soap and water to health care workers</i>	<i>Proportion of facilities with hand washing stations</i>	<i>100%</i>
	<i>3.10 Strengthen routine monitoring and regular evaluation of IPC program implementation</i>	<i>Capacity building on data management (collection, analysis and utilization of tools) at the national and provinces</i>	<i>Proportion of facilities collecting, analysing and utilizing data at the national and provinces</i>	<i>100%</i>
		<i>Monitor indicators and adopt audit tools for IPC at the national and provinces</i>	<i>Proportion of facilities monitoring IPC indicators at the national and provinces</i>	<i>100%</i>
		<i>Develop a feedback mechanism for IPC interventions</i>	<i>Proportion of facilities providing feedback for IPC interventions</i>	<i>100%</i>

		<i>Provincial to develop M&E plan for IPC</i>	<i>Proportion of facilities with M&E plan for IPC</i>	<i>100%</i>
4. Strengthen/maintain NHLS laboratory capacity to support testing for SARS-CoV-2				
Laboratory	<i>4.1 Ensure consistent adherence to requirements for safe packaging and transport of diagnostic human samples</i>	<i>Guidelines for specimen transport</i>	<i>COVID-19 guidelines developed</i>	<i>Complete</i>
		<i>Quick reference guide for HCWs</i>	<i>HCWs guide developed</i>	<i>Complete</i>
		<i>Communications with sending labs and couriers</i>	<i>Number of packages received that did not meet safety requirements</i>	<i>Weekly</i>
	<i>4.2 Maintain capacity to test SARS-CoV-2</i>	<i>Procure reagents and equipment</i>	<i>Weekly stock lists</i>	<i>Ongoing</i>
		<i>Update testing protocols as needed</i>	<i>SOP developed, updated regularly</i>	<i>Ongoing</i>
	<i>4.3 Train key lab staff on handling and processing of SARS-CoV-2</i>	<i>Train staff at national level</i>	<i>Number of staff trained</i>	<i>Monthly</i>
		<i>Roll out training to provincial level</i>	<i>Number of training workshops held</i> <i>Number of laboratories performing testing for SARS-CoV-2</i>	<i>Monthly</i>
5. Capacitate emergency medical services to respond to reported cases				
Emergency medical services	<i>5.1 Establish a standard operating procedure for EMS providers</i>	<i>Develop a national standard operational procedure for management of COVID-19 by EMS</i>	<i>SOP developed</i>	<i>Complete</i>
		<i>Disseminate to all provinces</i>	<i>SOP disseminated</i>	<i>Complete</i>
	<i>5.2 EMS to conduct workshops with all operational staff to ensure operational readiness</i>	<i>Hold workshops in the provinces</i>	<i>Workshops held</i>	<i>Monthly</i>
		<i>Hold practical workshops on ambulance preparation, isopod training and IPC for EMS staff for frontline staff</i>	<i>Number of provinces trained</i>	<i>9(100%)</i>
	<i>5.3 EMS to conduct exercises on a regular basis in conjunction with ports of entry and designated hospitals</i>	<i>Engage with respective officials at ports of entry and designated hospitals</i>	<i>Minutes of meetings</i>	<i>Weekly</i>
		<i>Plan, hold and debrief training exercises to test patient pathway of suspected or confirmed cases</i>	<i>Exercises conducted</i>	<i>Every Two weeks</i>
6. Establish and maintain screening capacity at key points of entry				
Points of Entry		<i>Establish a system for screening of travelers</i>	<i>System for screening in place</i>	<i>ongoing</i>

	6.1 Put in place a mechanism for systematic screening of travelers from affected countries	Deploy the required manpower	Proportion of required manpower deployed	80%
		Provide the required equipment to the teams Including thermal scanners and PPEs	Availability of the required equipment	100%
	6.2 Identify and equip isolation areas for suspected cases in high risk PoEs/or facilities	Designate space for isolation of suspected cases	Proportion of PoEs/or facilities with isolation areas	100%
		Equip the Isolation facilities	Number of isolation areas equipped	100%
	6.3 Conduct education and awareness creation with key stakeholders	Establish a referral pathway for suspected cases based on SOPs	Availability of referral pathways at the PoEs/or facilities	100%
		Hold awareness sessions with key stakeholders	Proportion of PoEs with sessions conducted	100%
		Print and provide IEC materials for points of entry	# of PoEs with IEC materials	100%
	6.4 Conduct training	Train port health officials on basics of coronavirus and SOPs	Proportion of port health officials trained	100%
7. Continuously inform the public on the Public Health risks of Coronavirus (COVID-19) and the related mitigation measures in various settings through (RCCE)				
Risk Communication and Community Engagement (RCCE)	7.1 Evidence generation (Knowledge, attitude and practices of Coronavirus Disease (COVID - 19)	Adapt tool for rapid Knowledge Attitude and Practice/Behavior (KAP/B) survey	Availability of a tool	Copy of tool
		Conduct KAP/B survey in two high risk provinces and disseminate the report	Finalized report	Copy of the report
		Update RCCE plan, policies, SOPs, IEC materials, etc.	RCCE plan finalized	Copy of plan
	7.2 Development and Production of evidence-based messages, communication materials and dissemination approaches	Create content development sub-committee and TORs	Availability of the sub-committee and TORs	Committee in place and copy of TORs
		Adapt messages and produce various IEC materials including flyers, banners, posters	Proportion of facilities with IEC materials	100%
		Disseminate messages through print media, radio and TV talk shows	# IEC material produced and disseminated	
		Press briefing to media houses/journalists (Interviews on Radio/TV, use of social media...) and disseminate a press release whenever needed	# of press briefing held	Weekly
	7.3 Daily media monitoring, including social media, perception and knowledge of	Production of clippings	# clippings available	
		Produce analytics	Reports available	Daily

	<i>communities on Coronavirus Disease (COVID - 19).</i>	<i>Track myths and misconceptions</i>	<i>Reports available</i>	<i>Daily</i>
	<i>7.4 Strengthen Social Mobilization and Community Engagement</i>	<i>Develop three days training package</i>	<i>Availability of training package</i>	<i>Copy of the training package</i>
		<i>Conduct 3 days training</i>	<i># of people trained</i>	
		<i>Conduct coordination weekly teleconference with provincial teams</i>	<i># teleconference conducted</i>	<i>Weekly</i>
		<i>On need basis convene national level RCCE orientation workshop with key sectors including transport, tourism, home affairs, DIRCO, CSOs, basic education, agriculture, traditional practitioners, etc.</i>	<i># of workshops held</i>	
		<i>Conduct Provincial technical support for training of trainers</i>	<i>Proportion of provinces with trained TOTs</i>	<i>100%</i>
		<i>Conduct house to house visits/sensitization in high risk settings</i>	<i># visits made</i>	
		<i>Disseminate IEC messages during public events, confined environments (schools and prisons), Mass Gathering, etc.</i>	<i>Proportion of public events where IEC material disseminated</i>	<i>90%</i>
		<i>Conduct simulation exercise in high risk areas in conjunction with other technical areas</i>	<i># of simulation exercises conducted</i>	<i>45</i>
	<i>7.5 Monitoring and evaluation tools and mechanisms</i>	<i>Develop data collection tools (qualitative and quantitative)</i>	<i>Data collection tools available</i>	<i>Copies of the data collection tools</i>
		<i>Set up data collection and capturing mechanism</i>	<i>Availability of data collection and capturing mechanism</i>	
		<i>Data analysis and Report production</i>	<i>Reports available</i>	<i>Monthly</i>
	<i>7.6 Promoting of integrated approach within IMS Team</i>	<i>Attend and report in daily IMS Team Meetings</i>	<i>Action plan from the meeting</i>	<i>Three times a week</i>
		<i>Participate in joint IMS Team activities including trainings, risks assessment, field visits, cross border activities, post event evaluation</i>	<i># of joint IMS team activities</i>	

	<i>7.7 Multi-sectoral Coronavirus Disease (COVID - 19) Risk Communications and Community Engagement Team</i>	<i>Multi Sectoral RCCE team activated and conducts weekly virtual contact</i>	<i># of virtual contacts made</i>	<i>Weekly</i>
8. Provide operational and logistics support to the preparedness and response teams.				
Operations, admin and logistics support	<i>8.1 Procurement of the required supplies</i>	<i>PPEs and IPC materials</i>	<i>Number of assorted PPE supplies (surgical masks, e95 masks, gloves, aprons, goggles)</i>	<i>50,000</i>
		<i>Equipment (thermal scanners, thermometers,</i>		
		<i>Lab reagents and equipment</i>		
		<i>Fuel</i>		
	<i>8.2 Transport and Warehousing</i>	<i>Transportation and warehousing of materials at national level</i>		
		<i>Transportation of materials to provinces</i>		
		<i>Transportation and accommodation of teams</i>		
	<i>8.3 Human resources</i>	<i>Recruit/deploy the required manpower to support preparedness and response.</i>		
	<i>8.4 Communications</i>	<i>Data and airtime</i>		

Gantt Chart

See annex 2.

Response Plan

FUNCTIONAL AREAS	ACTIVITIES
1. Coordination	Activate the national EOC Monitor the dedicated hotline 24/7 Produce daily sitrep and update senior management on the progress Hold daily IMT meetings Activate MNORT and convene weekly meetings Activate national SOPs Activate National Disaster Management Committee (NDMC)
2. Epi and Surveillance	Mobilize and deploy rapid response teams to affected areas to verify and conduct initial investigations Activate contact tracing Analyze data and generate regular reports on the outbreak Trace and identify the index case Monitor trends of the outbreak Establish a dashboard at national level
3. Case Management	Activate Isolation/treatment centers Support provincial, district and facility readiness, including IPC Train facilities and HCW in IPC and facility readiness Support clinicians who treat patients by providing Psychosocial services Collect, analyze and disseminate data on cases Support implementation of investigational protocols
4. Laboratory	Notify CDC and other appropriate individuals/department of positive case/s as per protocol Whole genome sequencing and viral culture initiated Deploy laboratory receiving and testing staff for increased number of samples (additional cases, contacts etc.) Send first few (5-10) positive specimens to international referral laboratory for confirmation Rapidly test specimens collected from case contacts
5. Emergency medical services	Deploy mobile isolation/treatment facilities Deploy teams to support case management Provide ambulance service
6. Ports of Entry	Activate the referral pathway Conduct exit screening Share information as appropriate Revamp the isolation areas in key PoEs Refresh port health staff on case definition and screening procedures Provide IEC materials pasted at strategic locations at PoEs

7. Risk Communication and Community Engagement	Prepare briefing for the media on the outbreak including preventive measures Monitor social media and address rumours in a timely manner Conduct radio, TV talk shows Civic education on corona virus disease Disseminate IEC materials
8. Operations, admin and Logistics support	Mobilize the required funding for the initial actions Review, recruit and deploy the required staff to support the response Provide PPEs and other supplies as stipulated in the contingency plan Monitor stock and immediately raise alerts when needed

ACTION – INITIAL 72 hours

FUNCTIONAL AREAS	ACTIVITIES
<p>1. Coordination</p>	<p>Activate the national EOC Continue monitoring the dedicated hotline 24/7 Provide initial update on the situation regarding numbers and public health actions being undertaken Hold daily IMT meetings Activate national SOPs Activate National Disaster Management Committee (NDMC)</p>
<p>2. Epi and Surveillance</p>	<p>Mobilize and deploy rapid response teams to affected areas to verify and conduct initial investigations Activate contact tracing Analyze data and generate regular reports on the outbreak Trace and identify the index case Monitor trends of the outbreak and establish a dashboard at national level</p>
<p>3. Case Management</p>	<p>Make contact with the attending clinicians and request completion of CRF Activate EMS and appropriate facilities for treatment of cases Identify and deploy surge human resource to support the response Implement IPC and ensure adherence to protocols.</p>
<p>4. Laboratory</p>	<p>Notify appropriate individuals of positive case/s as per protocol Deploy laboratory receiving and testing staff for increased number of samples (additional cases, contacts etc.) Rapidly test specimens collected from case contacts Activate MOUs with courier services to facilitate specimen transportation</p>
<p>5. Emergency medical services</p>	<p>Deploy mobile isolation/treatment facilities as needed Deploy teams to support case management Provide ambulance service</p>
<p>6. Points of Entry</p>	<p>Activate the referral pathway Conduct exit screening Share information as appropriate Revamp the isolation areas in key PoEs Refresh port health staff on case definition and screening procedures Provide IEC materials pasted at strategic locations at PoEs</p>
<p>7. Risk Communication and Community Engagement</p>	<p>Prepare briefing for the media on the outbreak including preventive measures Monitor social media and address rumours in a timely manner Conduct radio, TV talk shows Civic education on corona virus disease Disseminate IEC materials</p>

8. Operations, admin and Logistics support

Mobilize the required resources for the initial actions
Review and deploy the required staff to support the response
Provide PPEs and other supplies as stipulated in the contingency plan
Monitor stock and immediately raise alerts when needed

Planning assumptions

Scenarios:

- a. Best case scenario: Cases of novel coronavirus continue to be reported in China and other parts of the world. Alerts continue to be received and quickly managed but no confirmed case in South Africa.
- b. Most likely scenario: Cases of novel coronavirus continue to be reported in China and other parts of the world. One to ten sporadic confirmed imported cases reported in the country but quickly responded to and contained.
- c. Worst case scenario: Cases of novel coronavirus continue to be reported in China and other parts of the world. Imported cases are reported in South Africa followed by evidence of sustained human to human local transmission leading to over 200 cases detected in the country with a considerably high case fatality rate (CFR) above 3%.

ANNEXES

Annex 1

Budget

Annex 2

Gantt Chart

Annex 3

Procurement plan