Joint external evaluation of the International Health Regulations (2005) core capacities of

South Africa

Mission report

16–20 September 2024

World Health Organization

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Abbreviations

Africa CDC	Africa Centres for Disease Control and Prevention
AMR	antimicrobial resistance
AMS	antimicrobial stewardship
COVID-19	coronavirus disease
DHIS	District Health Information System
EBS	event-based surveillance
EHS	essential health services
HCAI	healthcare-acquired infection
HRH	human resources for health
IBS	indicator-based surveillance
IDSR	Integrated Disease Surveillance and Response
IHR	International Health Regulations
INFOSAN	International Food Safety Authorities Network
IPC	infection prevention and control
JEE	Joint External Evaluation
NATJOINTS	National Joint Operational and Intelligence Structure
NAPHS	national action plan for health security
PHEOC	public health emergency operations centre
POE	points of entry
RCCE	risk communication and community engagement
SANAS	South African National Accreditation System
VPD	vaccine-preventable disease
WHO	World Health Organization

Executive summary

The International Health Regulations (2005) (IHR) provide a global framework for health security that mandates each country to build and maintain essential public health capacities for prevention, preparedness, detection and response to health emergencies. As a State Party to the IHR (2005), South Africa has made significant progress in implementing these regulations since they took effect in 2007.

The second Joint External Evaluation (JEE) assessed South Africa's level of attainment of the IHR core capacities using the World Health Organization (WHO)IHR JEE tool version 3.0. The evaluation was conducted in September 2024 by a team of external experts with international experience in diverse technical areas, engaging with technical experts from South Africa's government bodies, academic institutions and development partners. Discussions covered 19 technical areas and were complemented by site visits at national and provincial levels, leading to the collaborative identification of priority actions.

This comprehensive report presents scores for the technical area indicators, highlights the strengths and challenges, and outlines priority actions by technical area, focusing on cross-cutting themes that require immediate attention to enhance health security.

While there are areas of improvement identified to strengthen emergency preparedness and response capacities in South Africa, the country has demonstrated commendable progress in several areas of IHR implementation. Key overarching strengths identified during the JEE include the following.

- Established legislation and good communication exist across sectors on zoonotic disease events, supported by the Multisectoral National Outbreak Response Team, provincial outbreak response teams and incident management teams with terms of reference at national and provincial levels, with existing capacity for rapid mobilization and deployment of officials.
- The country has comprehensive legislation (international – Codex Alimentarius) with acts and regulations guiding sanitary animal production practices and the ability to set standards that ensure compliance with international animal production and food safety standards.
- Political commitment supported by the following legal frameworks, once all enacted, will facilitate effective implementation of the IHR:
  - National Health Act
  - Disaster Management Act
  - National Public Health Institute of South Africa Act.
- Strong immunization capacity: South Africa demonstrates commendable vaccine procurement, access and delivery.
- Robust laboratory and antimicrobial resistance (AMR) capacity: South Africa has established robust specimen referral systems and diagnostic capacities, ranging from point-of-care services to whole genome and metagenomics analysis in human and animal laboratories.
- Well-established surveillance systems: notable analytics capacity at the national level enables data to be packaged, disseminated and used for public health action.
- Effective risk communication and community engagement (RCCE) partner coordination: mechanisms are in place to respond to public health emergencies.

Despite these commendable advancements, South Africa is encouraged to consider the following key recommendations.

- Conduct a legal analysis on relevant legal instruments for strengthening IHR implementation at national and intermediate levels.
- Complete domestication of IHR (2005) in South Africa.

- Strengthen financing mechanisms through resource mapping to inform funding for IHR implementation across all core capacities.
- Formally designate the IHR National Focal Point and national coordination centre with specific terms of reference according to the IHR and provide the necessary resources to enable them to perform all functions effectively.
- Establish a well-coordinated public health emergency operations centre (PHEOC) to effectively coordinate response to public health emergencies that are not declared disasters.
- Enhance human resource capacity by developing and implementing a multisectoral health workforce strategy, including guidelines on surge capacity development and management, to ensure availability of competent and skilled personnel across all IHR areas during emergencies.
- Conduct a comprehensive core capacity and strategic risk assessment of points of entry (POE) using the WHO tools, update the designation of POE to include ports and ground crossings, and develop capacities based on the IHR.
- Enhance surveillance by rolling out event-based surveillance (EBS) across all provinces and digitalizing data collection systems at the health facility/clinic level, including building data interoperability functions across surveillance systems and relevant sectors.
- Develop, implement and routinely monitor the 2025–2030 National Action Plan for Health Security (NAPHS) and associated annual plans with representatives from all relevant sectors.

South Africa has many lessons learned from coronavirus disease (COVID-19). Applying these lessons requires systematic collaboration, integration of activities and enhanced surveillance and response; all of which will strengthen the country's health security. The country's continued contribution to global research will further bolster these efforts. By leveraging the insights gained from the COVID-19 experience, sustaining the commendable advancements already made, and committing to the outlined recommendations across the 19 technical areas, South Africa can further enhance its public health capacities, ensuring a resilient and robust health security framework for the future.

South Africa: scores and priority actions

Scores: 1=No capacity; 2=Limited capacity; 3=Developed capacity; 4=Demonstrated capacity; 5=Sustainable capacity.

Technical areas	Indicator number	Indicator	Score	Priority Actions
Prevent				
P1. Legal instruments	**P1.1.**	Legal instruments	**2**	• Complete the domestication of the International Health Regulations (2005) (IHR) through Parliament. • Conduct a comprehensive legal analysis of the IHR-relevant legal instruments involving all sectors and across all government levels. • Develop and/or revise the necessary legal instruments to support IHR implementation at national and intermediate levels. • Conduct a systematic assessment of gender gaps in one or more of the IHR capacities. • Develop and implement an action plan to address identified high priority gender gaps from the systematic assessment.
	P1.2.	Gender equity and equality in health emergencies	**1**	
P2. Financing	**P2.1.**	Financial resources for IHR implementation	**3**	• Engage health financing stakeholders strategically in IHR multisectoral coordination mechanisms and develop performance-based indicators and objectives related to IHR implementation, for inclusion in programme-based budgeting. • Utilize health security resource mapping and expenditure data to routinely inform budget allocation and to mobilize domestic financing to fill gaps in priority IHR-related activities at all levels. Ensure funds are spent effectively. • Revise the Public Financial Management Act or consider exceptions or alternatives to establishing a contingency funding mechanism that is fit-for-purpose for public health emergency response.
	P2.2.	Financial resources for public health emergency response	**3**	
P3. IHR coordination, national IHR focal point functions and advocacy	**P3.1.**	National IHR focal point functions	**2**	• Develop advocacy tools and ensure legal mandate for the designation of an IHR National Focal Point office or centre with specific terms of reference stating the mandatory roles and responsibilities according to IHR (2005). • Develop, implement and routinely monitor the 2025–2030 National Action Plan for Health Security (NAPHS) and associated annual plans with representatives from all relevant sectors. • Finalize the IHR standard operating procedures to include communications with the relevant sectors and each sector's role and responsibilities.
	P3.2.	Multisectoral coordination mechanisms	**4**	
	P3.3.	Strategic planning for IHR, preparedness or health security	**3**	

Technical areas	Indicator number	Indicator	Score	Priority Actions
P4. Antimicrobial resistance (AMR)	P4.1.	Multisectoral coordination on AMR	3	• Update the National Action Plan and strategies for AMR to include involvement of all relevant sectors. • Develop strategies to scale up antimicrobial stewardship (AMS) activities in public and private sectors. • Develop materials and tools for sensitizing antimicrobial consumption experts in both public and private health sectors.
	P4.2.	Surveillance of AMR	4	
	P4.3.	Prevention of multidrug-resistant organisms (MDRO)	4	
	P4.4.	Optimal use of antimicrobial medicines in human health	4	
	P4.5.	Optimal use of antimicrobial medicines in animal health and agriculture	3	
P5. Zoonotic diseases	P5.1.	Surveillance of zoonotic diseases	4	• Finalize the One Health Strategy, standardize One Health preparedness and response activities at national and provincial levels, and create a directory of members. • Re-prioritize zoonotic diseases and update the operational plans for monitoring and evaluation through simulation exercises, after-action reviews and intra-action reviews. • Assess and map the existing training capacity and programmes that are available for zoonotic diseases across sectors and determine how these can be utilized to strengthen One Health expertise. • Establish an interoperable surveillance system and strengthen relationships across sectors to share information, e.g. agree on frequency of reporting (weekly, monthly, etc.).
	P5.2.	Response to zoonotic diseases	4	
	P5.3.	Sanitary animal production practices	4	
P6. Food safety	P6.1.	Surveillance of foodborne diseases and contamination	3	• Equip the health workforce with needed tools and skills to undertake rapid risk assessments of acute foodborne events at the national and intermediate levels through implementation of event-based surveillance (EBS). • Establish a well-trained multisectoral rapid response team on foodborne event detection, reporting and response, with capacities for EBS across all provinces. • Regularly conduct simulation exercises to test food safety emergency response plans and assess and review the response, collaboration and communication mechanisms. • Regularly conduct intra-action and after-action reviews to document lessons learned following foodborne safety events and implement corrective actions to address any identified gaps. • Conduct a comprehensive review of the Policy Guidelines for Food Safety Alerts and Food Product Recalls, draft updated guidelines, and possibly rename them. • Increase testing and analytic capacity of network of laboratories for food safety including screening, with accreditation and quality management systems in place.
	P6.2.	Response and management of food safety emergencies	4	

Technical areas	Indicator number	Indicator	Score	Priority Actions
P7. Biosafety and biosecurity	**P7.1.**	Whole-of-government biosafety and biosecurity system is in place for human, animal and agriculture facilities	**3**	• Map stakeholders and resources for supporting the regulatory framework and governance structures for biosafety and biosecurity regulations in the country. • Develop national biorisk management guidelines to support the implementation of national regulations for biosafety and biosecurity. • Develop a standardized national biorisk management training curriculum based on the aforementioned guidelines to ensure access to standardized trainings. • Develop strategies and action plans to address accessibility of biosafety and biosecurity training across sectors.
	P7.2.	Biosafety and biosecurity training and practices in all relevant sectors (including human, animal and agriculture)	**4**	
P8. Immunization	**P8.1.**	Vaccine coverage (measles) as part of national programme	**3**	• Strengthen community engagement using innovative approaches (community dialogues, co-design of vaccination plan with communities, etc.) to enhance vaccine coverage for both routine and supplementary immunization. • Strengthen coordination mechanisms with stakeholders at all levels including the establishment of an immunization technical working group. • Develop an electronic immunization register and defaulter tracking system. • Endorse and implement the National Immunization Strategy and implement the Reaching Every District Strategy in all provinces. • Establish and implement service level agreements with private service providers in the remaining provinces.
	P8.2.	National vaccine access and delivery	**4**	
	P8.3.	Mass vaccination for epidemics of vaccine-preventable diseases (VPDs)	**4**	
Detect				
D1. National laboratory systems	**D1.1.**	Specimen referral and transport system	**4**	• Develop a strategy for improving information and communication technology infrastructure to ensure backup and data security across sectors. • Develop a national integrated database of human and animal diagnostic laboratories including point-of-care testing capacities. • Finalize the strategy for electronic laboratory diagnostic testing handbooks to improve turnaround time and referral systems in human health. • Map laboratory diagnostic capacity for animal health laboratories to improve the tier diagnostic and referral mechanism.
	D1.2.	Laboratory quality system	**4**	
	D1.3.	Laboratory testing capacity modalities	**5**	
	D1.4.	Effective national diagnostic network	**4**	

Technical areas	Indicator number	Indicator	Score	Priority Actions
D2. Surveillance	D2.1.	Early warning surveillance function	3	• Advocate for and develop a formalized system for disease surveillance information exchange among human, animal and environmental health sectors. • Advocate for additional funding for the implementation of the Integrated Disease Surveillance and Response (IDSR) Strategy. • Implement IDSR, including review of guidelines and expansion of core indicator-based surveillance (IBS) and EBS systems, extending coverage to all relevant public and private health facilities, and other relevant healthcare providers • Integrate information from multiple sources, various information products and reports into one bulletin (i.e. data/information from sentinel, EBS and IBS reports). • Employ trained staff at all levels as required for human and animal health surveillance systems.
	D2.2.	Event verification and investigation	4	
	D2.3.	Analysis and information sharing	4	
D3. Human resources	D3.1.	Multisectoral workforce strategy	2	• Collaborate with other relevant sectors to review and update health workforce strategy to a multisectoral health workforce strategy. • Fast-track the institutionalization of the specialization of epidemiology, with a clear career trajectory within the public service, including the primary public health levels, following a One Health approach. • Conduct mapping of required workforce competencies and implement regular and routine competency-based training programmes through a One Health approach covering all professions and cadres in human health, animal health, agriculture, disaster management, food safety, livestock, fisheries, trade, international transport, points of entry (POE), emergency services, environment, finance, chemical safety, radiation safety, labour, education, foreign affairs, civil society and other sectors at the national and intermediate levels. • Conduct gap analysis for surge workforce required in all sectors for emergencies (e.g. security, human health, animal health and environment) and develop and implement a surge workforce development strategic plan.
	D3.2.	Human resources for implementation of IHR	3	
	D3.3.	Workforce training	1	
	D3.4.	Workforce surge during a public health event	1	

Technical areas	Indicator number	Indicator	Score	Priority Actions
Respond				
R1. Health emergency management	**R1.1.**	Emergency risk assessment and readiness	**3**	• Update and/or conduct risk profiling and develop and test the all-hazards plans at national and provincial levels with the involvement of all relevant sectors. • Establish and adapt an agile mechanism to fast-track the approval and implementation of all relevant documents for public health emergency management in the country. • Establish and operationalize with clear mandate the PHEOCs at national and provincial levels to streamline the coordination of public health emergencies in the country. • Develop/update national plans, protocols, standard operating procedures, technical guidelines and toolkits for preparing, mobilizing, sending, receiving and coordinating health personnel deployment and teams (surge teams) including emergency medical teams' operationalization, and for information sharing as appropriate during emergencies. • Establish and maintain pre-arrangements and memoranda of understanding to facilitate public-private partnerships for multisectoral/ multidisciplinary research, development and innovation during health emergencies, including the establishment of a repository for findings dissemination and utilization.
	R1.2.	Public health emergency operations centre (PHEOC)	**3**	
	R1.3.	Management of health emergency response	**3**	
	R1.4.	Activation and coordination of health personnel in a public health emergency	**2**	
	R1.5.	Emergency logistic and supply chain management	**4**	
	R1.6.	Research, development and innovation	**4**	
R2. Linking public health and security authorities	**R2.1.**	Public health and security authorities (e.g. law enforcement, border control, customs) are linked during a suspect or confirmed biological, chemical or radiological event	**3**	• Review/update the current memorandum of agreement between the National Department of Health and South African Police Service to include other relevant sectors, taking into consideration an all-hazard approach. • Organize advocacy events to sensitize staff from relevant sectors on roles and responsibilities during a suspected or confirmed biological threat or other incidents of concern, such as chemical and radiological events. • Develop relevant standard operating procedures and guidelines defining the process and communication mechanisms for assessing and responding to suspected deliberate international events. • Develop training curricula using country-specific content, such as regulations/authorities, agency roles/responsibilities and case studies. • Conduct and document joint training for public health, animal health and security authorities to orient, exercise and institutionalize the knowledge of memoranda of agreements and other agreements related to all hazards.

Technical areas	Indicator number	Indicator	Score	Priority Actions
R3. Health services provision	**R3.1.**	Case management	**4**	• Develop/finalize the National Continuity of Essential Health Services Guidelines. • Consolidate and update case management guidelines, including all IHR hazards, into one document both electronic and hard copy; establish and maintain a tracker of the dates when guidelines are updated. Additionally, finalize the Policy and Guidelines on Traditional Medicine. • Strengthen public-private partnerships in health service provision: develop guidelines on public-private partnerships in health service delivery before and during emergencies; improve data reporting; and enhance monitoring of services utilization, including regular analysis of outpatient utilization rates. • Consider adopting and investing in the WHO Strengthening and Utilizing Response Groups for Emergencies (SURGE) training to address the shortage of staff for emergency response. • Conduct routine on-site mentoring and provide supportive supervision to monitor the implementation of guidelines at the lowest levels. • Invest in addressing human resource shortages and improvement of infrastructure (e.g. isolation wards).
	R3.2.	Utilization of health services	**3**	
	R3.3.	Continuity of essential health services (EHS)	**4**	
R4. Infection prevention and control (IPC)	**R4.1.**	IPC programmes	**2**	• Establish IPC structure in the appropriate directorate at national, provincial and facility levels and standardize the structures across all provinces with clear reporting lines. • Develop an in-service training curriculum and incorporate outbreak components to standardize IPC training at all levels. • Collaborate with the AMR team to update the Healthcare-acquired Infection Strategic Plan. • Update the standards and norms for safe health environments to be comprehensive and more elaborate.
	R4.2.	HCAI (healthcare-acquired infection) surveillance	**2**	
	R4.3.	Safe environment in health facilities	**2**	

Technical areas	Indicator number	Indicator	Score	Priority Actions
R5. Risk communication and community engagement (RCCE)	**R5.1.**	RCCE systems for emergencies	**4**	• Develop a multisectoral, multi-hazards national RCCE strategy that includes all the available disease-specific plans and beyond. • Establish a strong monitoring and evaluation mechanism with key performance indicators for different areas of focus (e.g. function, repository of documentation, analysis, documentation across the IHR core capacities at all levels, dissemination of RCCE materials, advocacy for resource mobilization, etc.). • Strengthen community engagement using innovative approaches to co-design interventions with communities across the IHR core capacities. • Set an effective infodemic mechanism to manage online and offline data (function/national personnel, social listening, feedback, rumour tracking, etc.) to domesticate infodemic management and strengthen national leadership. • Review and update the Health Promotion Policy and Strategy and RCCE Framework for Health Emergencies with guidelines, action plans, toolkits, and roles and responsibilities for national, provincial, district and sub-district levels by end of financial year (March 2025). • Conduct mapping of stakeholders and engage them systematically at community levels.
	R5.2.	Risk communication	**4**	
	R5.3.	Community engagement	**3**	
IHR-related hazards and points of entry and border health				
POE. Points of entry and border health	**POE1.**	Core capacity requirements at all times for POE (airports, ports and ground crossings)	**3**	• Conduct a comprehensive core capacity and strategic risk assessment using the WHO tools and update the designation of POE to also include ports and ground crossings based on the IHR (2005) requirements. • Develop and implement, in collaboration with other relevant stakeholders, a multisectoral POE strategic plan to enable the attainment of required IHR core capacities for all designated and relevant non-designated POE. • Provide/construct screening infrastructure, interview rooms and isolation facilities at all POE. • Develop a human resource plan to address staffing challenges and formalize arrangements for surge capacity during public health emergencies. • Conduct population mobility and connectivity mapping at ground crossings and engage stakeholders (local surveillance teams and security authorities) to enhance surveillance and control at high-risk locations including porous borders.
	POE2.	Public health response at POE	**3**	
	POE3.	Risk-based approach to international travel-related measures	**4**	

Technical areas	Indicator number	Indicator	Score	Priority Actions
CE. Chemical events	**CE1.**	Mechanisms established and functioning for detecting and responding to chemical events or emergencies	**3**	• Review and update the National Health Emergency Response Plan to include all major hazard sites and facilities. • Establish formal multisectoral coordination and collaboration mechanisms involving all relevant stakeholders for chemical events. • Conduct tabletop and simulation exercises to improve chemical event surveillance and response readiness.
	CE2.	Enabling environment in place for management of chemical event	**2**	
RE. Radiation emergencies	**RE1.**	Mechanisms established and functioning for detecting and responding to radiological and nuclear emergencies	**4**	• Strengthen the coordinating mechanism between the Department of Health and Department of Energy and Electricity through a memorandum of agreement. • Expand the nuclear and radiation emergency training into a national training programme that is based on the International Atomic Energy Agency Capacity Building Centre initiative/support. Make the training available on-demand for all relevant sectors. • Formalize the involvement of all relevant sectors, such as the Border Management Authority at POE, in periodic radiation emergency exercises, through a memorandum of understanding.
	RE2.	Enabling environment in place for management of radiological and nuclear emergencies	**4**	

Prevent

P1. Legal instruments

Introduction

The International Health Regulations (2005) (IHR) provide obligations and rights for State Parties. In some State Parties, implementation of the IHR (2005) may require new or modified legislation. Even if new or revised legislation may not be specifically required, States may still choose to revise some regulations or other instruments to facilitate IHR implementation and maintenance. Implementing legislation could serve to institutionalize and strengthen the role of IHR (2005) and operations within the State Party. It can also facilitate coordination among the different entities involved in their implementation. (See detailed guidance on IHR (2005) implementation in national legislation). In addition, policies that identify national structures and responsibilities as well as the allocation of adequate financial resources are also important.

Target

Adequate legal instruments for State Parties to support and enable the implementation of all their obligations and rights created by the IHR. The development of new or modified legal instruments in some State Parties for the implementation of the Regulations. Where new or revised legal instruments may not be specifically required under a State Party's legal system, the State may revise some laws, regulations or other legal instruments to facilitate their implementation in a more efficient, effective or beneficial manner.

Level of capabilities

South Africa has, to a significant extent, made efforts to align its legislation with the IHR (2005). This is evident in the various pieces of legislation, regulations, policies, strategies and plans that the country has put in place for public health preparedness and response. The Disaster Management Act empowers the national executive to declare a state of disaster in order to respond to public health emergencies and other emergencies. It further provides for an intergovernmental committee on disaster management and a national disaster management centre, which promotes an integrated and coordinated system of disaster management. The Department of Cooperative Governance and Traditional Affairs is the lead sector for all emergencies in South Africa, acting through the Disaster Management Centre in coordination with provincial and district centres. Through the Disaster Management Act, coordinating bodies are established for pandemic management, at national, provincial and district levels. The National Health Act and its regulations, Notifiable Medical Conditions and Human Remains Regulations, provided for a mechanism to respond to the world's largest listeriosis outbreak during 2017–2018. The outbreak response was led by the National Department of Health and National Institute for Communicable Diseases and there was a good display of coordination and cooperation. This outbreak demonstrates the country's ability to effectively respond to public health emergencies at the national and intermediate levels. Incident management teams are established as required during public health emergencies.

South Africa also applies the IHR Act, 1974, which incorporates the provisions of the IHR 1969 to implement the IHR. While these may not be in line with the IHR (2005), they provide a basis for effective response during public health emergencies.

The country is currently in the process of domesticating the IHR (2005). The domestication of IHR (2005) is critical for the effective and efficient application of the IHR throughout all the related core capacities.

The National Health Act, 2003 empowers the Minister of Health to make regulations under the Act which require all actors, including private health establishments and private health services, to report notifiable medical conditions. The Notifiable Medical Conditions Regulations are being revised and

are currently published for public comments before promulgation. The Notifiable Medical Conditions Regulations require health professionals to report any suspicious medical conditions to the National Institute for Communicable Diseases and the National Department of Health as a matter of urgency. Stakeholder engagement is evident in the process of formulating regulations, and includes the public, academia, civil organizations and health associations, thus creating an awareness of the provisions of the particular regulations.

While it has been noted that there are various pieces of legislation cutting across the various core capacities of the IHR (2005), there has not been a legal mapping, nor a legal assessment of all relevant legal instruments involving all sectors and across all government levels using the One Health approach. An attempt to conduct such an exercise was carried out through the WHO report on Progress for the Development of South African Legislation that Keeps Abreast with the IHR and its subsequent amendments. The legal instruments that were mapped include the Disaster Management Act, the Public Finance Management Act, the National Health Act and the National Insurance Act. The report led to the drafting of the Points of Entry Regulations under the International Health Regulations Act, 1974 and Environmental Health Regulations under the National Health Act, 2003. Three other sets of regulations have been revised and are currently awaiting promulgation. These are the Human Remains Regulations, Notifiable Medical Conditions Regulations, and the Points of Entry Regulations. These Regulations were published for public comments, and the comments received from the public have been considered by the Department. They are currently being translated into four other official languages in accordance with the South African Language Policy.

The regulations cannot suffice without a proper comprehensive legal analysis, which would serve as a survey and assessment of all the legal instruments relevant to IHR implementation cutting across all the IHR capacities, in order to identify gaps and inconsistencies that may exist, and providing recommendations for bridging those gaps, such as repeals, amendments or promulgation of new legislation.

Regarding gender equity and equality, the Constitution of South Africa, 1996 (Act 108 of 1996) enshrines a Bill of Rights which provides for equality and non-discrimination. There are existing national policy frameworks that also promote the advancement of non-discrimination and gender equity and equality, such as the South Africa's National Policy Framework for Women's Empowerment and Gender Equality which outlines South Africa's vision for gender equality and how it intends to realize the ideal. It is a generic policy document which details the overarching principles which will be integrated by all sectors into their own sectoral policies, practices and programmes. This provides an enabling environment for ensuring that there are no gender gaps in the delivery of services during public health emergencies in any of the IHR capacities. The National Action Plan for Health Security (NAPHS) has identified high priority gender gaps, however, focus on gender-related issues is not comprehensibly addressed, resulting in gaps in critical data to ensure that gender issues are adequately addressed during public health emergencies. The country has not conducted a systematic assessment of gender gaps in any of the IHR capacities in order to make appropriate recommendations for intervention in this area.

Indicators and scores

P1.1. Legal instruments – Score 2

South Africa has made an attempt to conduct mapping of its legal instruments relating to IHR implementation, however this attempt has been devoid of a comprehensive legal mapping and assessment of its relevant legal instruments in order to appreciate the gaps that exist in prevailing laws and their relevance to the implementation of the IHR (2005) across all the IHR core capacities. If this exercise could be carried out, and necessary revisions and development of appropriate legal instruments prepared, using a One Health approach, South Africa would have strengthened its capacity beyond the current score. It is on that basis, therefore, that both the national team and the external team of experts agreed upon a score of 2.

Strengths

- Multisectoral collaboration exists during public health emergencies.
- There is an enabling legal environment for the review and development/amendment of laws relevant to IHR implementation.
- The process of domestication of the IHR (2005) through an Act of Parliament is pending.

Challenges

- Long and tedious legislative processes inhibit the timely domestication of the IHR (2005).

P1.2. Gender equity and equality in health emergencies – Score 1

The Constitution of South Africa provides for equality and non-discrimination. There are also existing national policy frameworks that also promote the advancement of non-discrimination and gender equity and equality, such as South Africa's National Policy Framework for Women's Empowerment and Gender Equality. However, South Africa has not yet conducted a systematic assessment of gender gaps in any of the IHR (2005) capacities.

Strengths

- National policy frameworks are in place that promote the advancement of non-discrimination and gender equity and equality.
- The Bill of Rights of the Constitution of South Africa, 1996 (Act 108 of 1996) is established and provides a foundation for gender equality.
- The Department of Women, Youth, and Persons with Disabilities has developed a Strategic Plan for 2020/2021–2024/2025.
- A framework for Women's Empowerment and Gender Equality has been established supported by the Commission for Gender Equality.

Challenges

- There is an absence of systematic assessments of gender gaps in any of the IHR capacities.

Recommended priority actions

- Complete the domestication of the IHR (2005) through Parliament.
- Conduct a comprehensive legal analysis of the IHR-relevant legal instruments involving all sectors and across all government levels.
- Develop and/or revise the necessary legal instruments to support IHR implementation at national and intermediate levels.
- Conduct a systematic assessment of gender gaps in one or more of the IHR capacities.
- Develop and implement an action plan to address identified high priority gender gaps from the systematic assessment.

P2. Financing

Introduction

The implementation of the IHR, including development of the core capacities, requires adequate financing. State Parties should ensure sufficient allocation of funds for the IHR implementation.

Target

States Parties ensure provision of adequate funding for the IHR implementation through the national budget or other mechanisms. Country has access to financial resources for the routine implementation of the IHR capacities, and financial resources that can be accessed on time and distributed for readiness and response to public health emergencies, are available.

Level of capabilities

South Africa has robust financial management and planning processes for health, based on legislation. Strategic priorities are set during cabinet meetings before the financial year begins, guiding budget allocations. Strategic long-term (five-year) and medium-term (three-year) budgetary plans are constructed through coordination between the National Treasury and relevant ministries, with engagement from provincial and local levels. Budgets are updated annually, with expenditure reviews used to develop and revise budgets; comprehensive reports are routinely disseminated to relevant stakeholders and often available to the public. Budgetary formulation can thus be adapted to meet agencies' needs through this process and through adjusted expenditure estimates.

Funding for IHR-related activities primarily comes from domestic sources, although there is no dedicated budget line. Financial constraints remain across IHR technical areas, and some priority actions are not able to be implemented as a result, or they require significant external financing from partners. Programme-based budgeting is robust and systematic with monitoring and accountability mechanisms in place, and financial planning appears broadly aligned with national priorities. However, there is a lack of performance-based indicators and objectives within the budget directly related to the IHR implementation. A costed interim NAPHS describes priority areas and helps indicate estimated resource needs for the IHR implementation in 2024/25, alongside sector-specific plans, although there is no evidence that detailed resource mapping is conducted to identify specific funding gaps in priority actions to strengthen the IHR. As a result, the country cannot routinely use this information to inform budgeting or advocacy in a detailed and targeted manner. In addition, there is a lack of coordination around financing, and financing stakeholders are not strategically engaged in meetings of the IHR technical working groups nor related multisectoral committees.

South Africa has various mechanisms to finance public health emergency response, relying initially on district or local budgets to deploy early investigation and response teams. When support from higher levels is needed, provincial or National Department of Health funds can be requested and are made available to deploy surge staff, for example from the emergency operation centre at the National Department of Health or National Institute for Communicable Diseases. There is also a Disaster Fund which can be made available following a graded classification of a disaster through the Department of Cooperative Governance and Traditional Affairs as classified under the Disaster Management Act 57 of 2002. Section 16 of the Public Financial Management Act allows for release of funds from the National Treasury during emergency situations, but funds are not always adequate for large-scale emergencies, and accessing these funds requires an official declaration and can be an overly rigid and lengthy process for public health emergencies, warranting possible revisions or exceptions to the Public Financial Management Act

guidelines. For example, despite WHO's recent declaration of mpox as a Public Health Emergency of International Concern, Public Financial Management Act funds have not been made accessible, and the country has had to rely on vaccine donations.

Indicators and scores

P2.1. Financing for IHR implementation – Score 3

This indicator was scored at a level of 3 indicating the presence of a costed 2024/25 NAPHS and the availability of financing. However, resource mapping has not been conducted to demonstrate sufficient domestic financing to implement priority IHR activities. There is also insufficient transparency around budget allocation and financing for IHR implementation given the absence of IHR-related performance-based indicators and objectives in the programme-based budgeting. It is thus not possible to systematically demonstrate effective use of funds or full budget execution.

Strengths

- A costed 2024/25 NAPHS is available along with information on general health financing from the multisectoral programme-based budgeting formulation process.
- There is availability of funding from domestic sources.

Challenges

- Many IHR technical areas cite resource gaps or rely on external financing.
- There is a lack of transparency around financing specifically for implementation of IHR activities.

P2.2. Financing for public health emergency response – Score 3

A score of 3 was provided given that resources are generally accessible in a timely manner for PHE response, but this has not been clearly demonstrated nor documented at all levels, and an appropriate emergency contingency is not always available.

Strengths

- Resources are often available to mobilize teams in a timely manner for investigation and response to public health emergencies.
- Public Financial Management Act enables funding for emergencies which were not previously budgeted and is applicable at national, provincial and local levels.

Challenges

- Funds are not always adequate for response, depending on the magnitude of the emergency.
- Accessing Public Financial Management Act funds is a rigid and lengthy process that is not fit-for-purpose as an effective contingency mechanism for PHE response.

Recommended priority actions

- Engage health financing stakeholders strategically in IHR multisectoral coordination mechanisms and develop performance-based indicators and objectives related to IHR implementation, for inclusion in programme-based budgeting.
- Utilize health security resource mapping and expenditure data to routinely inform budget allocation and to mobilize domestic financing to fill gaps in priority IHR-related activities at all levels. Ensure funds are spent effectively.
- Revise the Public Financial Management Act or consider exceptions or alternatives in order to establish a contingency funding mechanism that is fit-for-purpose for timely public health emergency response.

P3. IHR coordination, national IHR focal point functions and advocacy

Introduction

The effective implementation of the IHR requires multisectoral/multidisciplinary approaches through national partnerships for efficient alert and response systems. Coordination of nationwide resources, including the designation of an IHR National Focal Point, and adequate resources for IHR implementation and communication, is a key requisite for a functioning IHR mechanism at country level.

Target

Multisectoral/multidisciplinary approaches through national partnerships that allow efficient alert and response systems for effective implementation of the IHR. Coordination of nation-wide resources, including sustainable functioning of an IHR national focal point – a national centre for IHR communications which is a key obligation of the IHR – that is accessible at all times. States Parties provide WHO with contact details of IHR national focal points and continuously update and annually confirm them. Timely and accurate reporting of notifiable diseases, including the reporting of any events of potential public health significance according to the WHO requirements, and consistent relay of information to Food and Agriculture Organization and OIE. Planning and capacity development are undertaken and supported through advocacy measures to ensure high-level support for implementation of IHR.

Level of capabilities

South Africa has an IHR Secretariat made up of five people. These include the (Acting) Chief Director of Communicable Diseases of the National Department of Health who was appointed by the Director General of Health to act as the National Focal Point lead for South Africa; the Head of the Division of Public Health Surveillance and Response of the National Institute for Communicable Diseases; the National Department of Health Deputy Director for Port Health, the National Department of Health Deputy Director for Disaster Medicine; and the National Department of Health Deputy Director for Zoonotic Diseases. Though all members of the IHR Secretariat are knowledgeable, accessible 24/7 per the duty roster with seamless communication with WHO, there is no centre nor office that is designated as the IHR National Focal Point/centre.

A draft IHR standard operating procedure includes national focal point terms of reference and multisectoral coordination mechanisms including the Public Health Emergency Coordination Committee, Multisectoral National Outbreak Response Team and Incident Management Team, through which IHR meetings are conducted. However, there are insufficient legal instruments and arrangements to enable effective communication and coordination with all levels and relevant sectors of the State Party's administration.

Indicators and scores

P3.1. National IHR focal point functions – Score 2

The host country proposed a score of 2 due to the availability of the IHR Secretariat with a duty officer system to ensure availability at all times for urgent communications with WHO. However, legal, normative and institutional instruments and arrangements, including terms of reference describing the roles and responsibilities, are insufficient for the IHR Secretariat to communicate effectively with all levels and relevant sectors of the State Party's administration. The score of 2 was agreed upon by the external evaluators with the caveat that an IHR National Focal Point centre needs to be designated.

Strengths

- Five officials have been appointed to engage with their assigned sectors to allow for consistent and effective flow of information.
- Political support to implement the IHR (2005) is demonstrated via the development of the Second Presidential Health Compact (2024–2029), Pillar 10 for Pandemic Prevention, Preparedness and Response.
- A draft IHR standard operating procedure has been formulated which includes national focal point terms of reference.
- Multisectoral coordination mechanisms exist, including the Public Health Emergency Coordination Committee, Multisectoral National Outbreak Response Team and Incident Management Team.

Challenges

- South Africa lacks a centre designated as the IHR National Focal Point; as a result the five appointees operate remotely in their respective offices.
- Legal instruments and arrangements are insufficient to enable effective communication and coordination with all levels and relevant sectors of the State Party's administration.

P3.2. Multisectoral coordination mechanisms – Score 4

The country team proposed a score of 4 based on the existence of multisectoral coordination mechanisms for the IHR, and provision for a coordinated response. This score was agreed to by the external team of experts following provision of relevant evidence.

Strengths

- IHR coordination meetings are held and convened through existing mechanisms including Multisectoral National Outbreak Response Team, Incident Management Team and IHR Steering Committees at the national level.
- Public health and security authorities (e.g. law enforcement, border control and customs) are linked during response to a suspected or confirmed biological event.
- Multisectoral coordination exists at the intermediate level.
- A strong security intelligence system exists in the country. Also, the National Joint Operational and Intelligence Structure (NATJOINTS) plays a central role in coordinating all sectors for all incidents in the country including biological hazards, with real-time situational awareness. The system is cascaded to provincial and district levels and information systematically flows from the Provincial Joint Operations Centres to the National Joint Operational Centre (NATJOC) and vice versa.

Challenges

- The country lacks formal coordination instruments across relevant departments and sectors to guide effective engagements.

P3.3. Strategic planning for IHR, preparedness or health security – Score 3

The country team proposed the score of 3 indicating the availability of a draft NAPHS, though not costed, and development of annual operational plans that were monitored quarterly. No report on advocacy was provided. This score was agreed to by the external team of experts following the provision of the relevant documents.

Strengths

- A draft NAPHS from 2019 is available.
- The Annual Operational Plan has been developed, implemented and monitored quarterly.

Challenges

- The country does not have an advocacy strategy to engage the decision makers and legislative bodies.
- The NAPHS developed after South Africa's first JEE in 2017 remains in draft form; hence, it has not been costed and resource mapping could not be conducted.

Recommended priority actions

- Develop advocacy tools and ensure legal mandate for the designation of an IHR National Focal Point office or centre with specific terms of reference stating the mandatory roles and responsibilities according to the IHR (2005).
- **Develop, implement and routinely monitor the 2025–2030 NAPHS and associated annual plans with representatives from all relevant sectors.**
- Finalize the IHR standard operating procedures to include communications with the relevant sectors and each sector's roles and responsibilities.

P4. Antimicrobial resistance (AMR)

Introduction

Bacteria and other microbes evolve in response to their environment and inevitably develop mechanisms to resist being killed by antimicrobial agents. For many decades, the problem was manageable as the growth of resistance was slow and the pharmaceutical industry continued to create new antibiotics.

Over the past decade, however, this problem has become a crisis. AMR is evolving at an alarming rate and is outpacing the development of new countermeasures capable of thwarting infections in humans. This situation threatens patient care, economic growth, public health, agriculture, economic security, and national security.

Target

A functional system in place for the national response to combat AMR with a One Health approach, including:

a). Multisectoral work spanning human, animal, crops, food safety and environmental aspects. This comprises developing and implementing a national action plan to combat AMR, consistent with the Global Action Plan (GAP) on AMR.
b). Surveillance capacity for AMR and antimicrobial use at the national level, following and using internationally agreed systems such as the WHO Global Antimicrobial Resistance Surveillance System (GLASS) and the World Organisation for Animal Health global database on use of antimicrobial agents in animals.
c). Prevention of AMR in healthcare facilities, food production and the community, through infection prevention and control (IPC) measures.
d). Ensuring appropriate use of antimicrobials, including assuring quality of available medicines, conservation of existing treatments and access to appropriate antimicrobials when needed, while reducing inappropriate use.

Level of capabilities

The country has developed an AMR National Action Plan/Strategy incorporating objectives in both human and animal health. The Ministerial Advisory Committee on AMR has been established with clear terms of reference and includes members from human health under the National Department of Health, as well as animal health practitioners under the Department of Agriculture (DOA). Multidrug-resistant organism (MDRO) surveillance is functional for the human health sector with robust monitoring systems. The animal health sector, through the DOA, has established an Integrated National Bacterial Food Contamination Monitoring and Antimicrobial Resistance Surveillance Programme.

There is a real-time AMR human disease surveillance programme with a robust system for collecting samples, conducting phenotypic and molecular analysis, and reporting to the World Health Organization GLASS. Surveillance data is visualized in an AMR dashboard housed at the National Institute for Communicable Diseases. This is combined with an overview of the usage of antimicrobials by the public sector, into a single antimicrobial stewardship (AMS) dashboard.

The AMR strategy is anchored within the National Department of Health, which hinders the direct involvement of other government agencies. Involvement of private health sectors in AMR and AMS needs strengthening. There is inadequate funding for AMR activities across sectors. Integration of AMR and AMS data across human and animal health sectors is lacking.

Indicators and scores

P4.1. Multisectoral coordination on AMR – Score 3

The consensus score was 3, consistent with the country's self-assessment, based on the fact that the county has established the Ministerial Advisory Committee for AMR with clear terms of reference and meetings conducted regularly.

Strengths

- The Ministerial Advisory Committee for AMR coordinates AMR activities across both the private and public sectors in human health, together with the South African Society of Clinical Microbiologists.
- There is a newly established country-wide AMR surveillance system for animal health.
- Surveillance on the utilization of antimicrobials in the public sector is presented on an electronic dashboard.
- Both the country's AMR (public and private) and antimicrobial use are represented on an integrated AMS dashboard. The AMR data is freely available to the public through the National Institute for Communicable Diseases website.

Challenges

- The country lacks a One Health strategy for AMR to support data integration, joint awareness campaigns and resource mobilization.
- There is also no dedicated budget for implementation of AMR activities across sectors.

P4.2. Surveillance of AMR – Score 4

The consensus score was 4, consistent with the country's self-assessment score, based on the fact that AMR data is collated nationally for selected pathogens, visualized through an electronic dashboard, and is reported to GLASS for human infections; routine surveillance for animal health AMR is ongoing through an established programme.

Strengths

- Surveillance capacity for AMR and antimicrobial use is established at the national level, and the data is illustrated on an electronic dashboard managed by the National Department of Health.
- The country participates in the WHO GLASS on an annual basis.
- The National Institute for Communicable Diseases has the Generic Surveillance for Emerging Microorganisms (GERMS)-South Africa, which was established for laboratories for enhanced surveillance of sexually transmitted infections, lower respiratory tract infections, Enterococcus faecium, Staphylococcus aureus, Klebsiella pneumoniae, Acinetobacter baumannii, Pseudomonas aeruginosa and Enterobacter species pathogens.
- The national veterinary laboratory has the capability to perform phenotypic antibiotic susceptibility testing (AST) as well as molecular and genomic assays for the detection, isolation and identification of AMR in animals and food products of animal origin.

Challenges

- South Africa has not yet integrated AMR surveillance of human, animal and plant sectors.
- AMR surveillance standardization for animal health is currently inadequate.

P4.3. Prevention of multidrug-resistant organisms (MDRO) – Score 4

The consensus score was 4, consistent with the country's self-assessment score, indicating that the country has established MDRO surveillance in public health facilities. MDRO surveillance for the private sector and the animal health sector has not identified organisms for prioritization.

Strengths

- MDROs have been added as category 4 of the Notifiable Medical Conditions of the National Health Act to regulate the surveillance and control of infectious diseases.
- There is functional MDRO surveillance in public health facilities with access to AST.

Challenges

- There is inadequate involvement of some public and private sectors in standardization of the MDRO surveillance approach.
- Specimen collection for MDRO laboratory testing is lacking in primary health facilities.

P4.4. Optimal use of antimicrobial medicines in human health – Score 4

A consensus was reached on a score of 4 consistent with the country's self-assessment score, indicating that the country has established guidelines and practices to enable appropriate use of antimicrobials in public and private healthcare facilities.

Strengths

- South Africa has strong regulatory authority oversight (South African Health Products Regulatory Authority) of the registration and use of medicines, including antibiotics.
- Standard Treatment Guidelines and Essential Medicines Lists are regularly updated based on evidence from surveillance reports.
- AMS data is available in a database accessible through username and password.

Challenges

- Consolidation of antimicrobial use data in the private sector is lacking.
- Inadequate frameworks are in place to review, evaluate and update the AMS and antimicrobial use interventions for sustainability.

P4.5. Optimal use of antimicrobial medicines in animal health and agriculture – Score 3

The country's self-assessment score was 4, which was reviewed during the JEE. The consensus score with the team of external experts was 3. The capacity observed was that national control over the manufacture, import, marketing authorization, safety, quality, efficacy and distribution of antimicrobial products and/or antimicrobial pesticides is evident. However, over-the-counter prescription of animal medicine is practiced.

Strengths

- Antimicrobial medicines under animal health and the agricultural sector are regulated through different legislative instruments, namely Act No. 101 of 1965, Act No. 36 of 1947, and Act No. 19 of 1982.
- The South African Veterinary Council acts as a law enforcement agency that deals with any contraventions in the prudent usage of antimicrobial medicines.

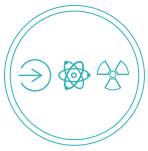
Challenges

- Over-the-counter medicines are dispensed with a withdrawal period instruction in food animals. The potential for withdrawal period instruction violations is another possibility.
- Food animals being presented for slaughter require owner declaration of health for such animals, which also covers the withdrawal period confirmation by animal owner.
- There is no data consolidation between the public and private agriculture sectors.

Recommended priority actions

- Update the National Action Plan and strategies for AMR to include involvement of all relevant sectors.
- Develop strategies to scale up AMS activities in public and private sectors.
- Develop materials and tools for sensitizing antimicrobial consumption experts in both public and private health sectors.



P5. Zoonotic diseases

Introduction

Zoonotic diseases are communicable diseases that can spread between animals and humans. These diseases are caused by viruses, bacteria, parasites and fungi carried by animals, insects or inanimate vectors that aid in its transmission. Approximately 75% of recently emerging infectious diseases affecting humans are of animal origin; and approximately 60% of all human pathogens are zoonotic.[1]

Target

Functional multisectoral, multidisciplinary mechanisms, policies, systems and practices are in place to minimize the transmission of zoonotic diseases from animals to human populations.

Level of capabilities

In South Africa, the interplay among human, livestock and wildlife populations creates an environment conducive to the emergence and transmission of zoonotic diseases. The country is recognized for its rich biodiversity, which includes a variety of wildlife species that can act as reservoirs for zoonotic pathogens. This biodiversity, coupled with a high level of interaction between humans and animals, particularly in rural and peri-urban settings, increases the risk of zoonotic spill over events.

South Africa has established a One Health Forum aimed at strengthening coordination and collaboration of all stakeholders across sectors, guided by a One Health approach. The country additionally has a One Health Steering Committee at the national level that is co-chaired by the National Department of Health, Department of Forestry, Fisheries and the Environment, and Department of Agriculture, Land Reform and Rural Development. This committee assists with coordination and communication across the relevant sectors, which is essential for policy development and planning related to preparedness, detection, assessment and response to zoonotic diseases. One Health groups are also established at the provincial or intermediate level or exist within bigger provincial disaster/outbreak management committees; the structure of such groups is not standardized, but it serves to embrace the One Health approach.

The country has a list of prioritized zoonotic diseases that was compiled in 2016. There is a need to update the list due to changing disease epidemiology and emerging or re-emerging diseases.

Good communication exists across sectors on zoonotic events due to the existence of the Multisectoral National Outbreak Response Team, provincial outbreak response teams and incident management teams with terms of reference at national and provincial levels with existing capacity for rapid mobilization and deployment of officials when needed.

The country has comprehensive legislation (international – Codex Alimentarius) with acts and regulations guiding sanitary animal production practices. However, the effective implementation and auditing of standards is challenging, as not all farmers automatically comply and there are great differences in structure and resources among commercial, small-scale and communal farming operations.

[1] Sources: Host Range and Emerging and Reemerging Pathogens – Mark EJ Woolhouse, Sonya Gowtage-Sequeria (https://wwwnc.cdc.gov/eid/article/11/12/05-0997_article); Global Trends in Emerging Infectious Diseases – Kate E Jones et al. (https://pubmed.ncbi.nlm.nih.gov/18288193/).

Indicators and scores

P5.1. Surveillance of zoonotic diseases – Score 4

The country team proposed a score of 4, indicating the availability of a list of prioritized zoonotic diseases, the use of a One Health approach at the national and intermediate levels and the support of legislation. The score of 4 was agreed upon by the external evaluators following the review of relevant evidence provided.

Strengths

- Strong One Health collaboration exists in response to zoonotic disease outbreaks (whether initiated by the human, veterinary or environmental health sectors).
- The Multisectoral National Outbreak Response Team, Provincial Outbreak Response Teams and specific incident management teams with terms of reference at national and provincial levels have capacity for rapid mobilization and deployment of officials.
- The zoonotic diseases unit established at the National Department of Health has an operational plan to address priority zoonotic diseases of greatest national public health concern.
- Good legislature is in place that enables surveillance and response in the animal and human health sectors.
- Strong lab capacities are evident in both human and animal sectors. The National Institute for Communicable Diseases supports other countries in the region with laboratory diagnostics and training.
- Provinces have good coordination and communication at local levels most notably in Gauteng, KwaZulu–Natal and Western Cape Provinces.

Challenges

- Conflicting priorities in different departments dictate funding mandates and prioritization.
- Certain departments do not have online surveillance systems, which may lead to delays.
- The country does not yet have an interoperable Integrated Disease Surveillance and Response (IDSR) platform, but it is under development.
- High staff turnover and vacancy rates exist in some departments.

P5.2. Response to zoonotic diseases – Score 4

The country team proposed a score of 4 during their self-assessment, based on the country's capacity to detect, assess and respond to zoonotic disease events due to the existence of a multisectoral operational mechanism (One Health approach) at the national and intermediate levels. This capacity was demonstrated in the past, for example, through frequent responses to rabies outbreaks in humans and animals, including Cape fur seals (2024), COVID-19 in a puma (2020) and lions (2021), and Brucella melitensis spillover from infected goats to humans (2023). The score of 4 was agreed upon by the external team of experts following the presentation of evidence.

Strengths

- Multisectoral response teams are formed in response to outbreaks, for example, the Western Cape Province working group for response to the outbreak of rabies in Cape fur seals (2024), COVID-19 in a puma (2020) and lions (2021), and Brucella melitensis spillover from infected goats to humans (2023).
- One Health mechanisms are available at the national and intermediate levels, that either meet regularly or as needed.
- Development of plans and guidelines encourages the regular review of coordination mechanisms, and provides a platform for inter-sectoral collaborations and delineation of roles and responsibilities.

Challenges

- The existing national One Health framework is yet to be aligned with the One Health Joint Plan of Action and finalized.
- Resource constraints (human and financial) and competing priorities exist in human, animal and environmental health sectors.

P5.3. Sanitary animal production practices – Score 4

The country team proposed the score 4 during their self-assessment indicating the country's capacity to maintain a well-organized commercial agricultural sector that has several representative bodies/associations that can be consulted (for example, South Africa Poultry Association and Red Meat Association). South Africa has robust production systems in the commercial sector where the end users with major buying power are able to set standards that ensure compliance with international animal production and food safety standards (for example, Hazard Analysis and Critical Control Points (HACCP), ISO 2200, European Commission Benchmark (ECB), Good Manufacturing Practices (GMP) and South Africa National Standards (SANS) 241 for water). Sanitary animal production practices are guided by relevant legislation. The score of 4 was agreed upon by the external team of experts following the presentation of evidence.

Strengths

- Comprehensive legislation (international – Codex Alimentarius), and local acts and regulations are in place guiding sanitary animal production practices in South Africa.
- There is availability of a set of guidelines to ensure that zoonotic diseases are controlled during and after an outbreak. The preventive measures instituted during outbreaks are implemented to prevent recurrence and promote transparency and diligence within the value chain.
- World class production systems are in place in the commercial sector where the end users with major buying power are able to set standards that ensure compliance with international animal production and food safety standards (e.g., HACCP, ISO 2200, ECB, GMP and SANS 241 for water).
- The country maintains a well-organized commercial agricultural sector that has several representative bodies/associations that can be consulted (e.g., South Africa Poultry Association, Red Meat Association).

Challenges

- South Africa has a dual agricultural sector (commercial vs. small scale/subsistence/ communal). Within the small-scale/subsistence/communal agriculture sector there are often limited capital inputs available to strengthen the biosecurity and production standards.
- The effective implementation and auditing of standards is challenging, as not all farmers automatically comply. Ideally, an incentive for compliance is required (e.g., access to a specific market, getting a better price for products, etc.).
- The country lacks a centralized digital animal health unique identification system and breeding system; there are many fragmented systems.

Recommended priority actions

- Finalize the One Health Strategy, standardize One Health preparedness and response activities at national and provincial levels, and create a directory of members.
- Re-prioritize zoonotic diseases and update the operational plans for monitoring and evaluation through simulation exercises, after-action reviews and intra-action reviews.
- Assess and map the existing training capacity and programmes that are available for zoonotic diseases across sectors and determine how these can be utilized to strengthen One Health expertise.
- Establish an interoperable surveillance system and strengthen relationships across sectors to share information, e.g. agree on frequency of reporting (weekly, monthly, etc.).

P6. Food safety

Introduction

Food- and water-borne diarrhoeal diseases are one of the leading causes of illness and death, particularly in children and especially in developing countries. The rapid globalization of food production and trade has increased the potential likelihood of international incidents involving contaminated food. The identification of the source of an outbreak and its containment are critical for control. Risk management capacity with regard to control throughout the food chain continuum must be developed. If epidemiological analysis identifies food as the source of an event, based on a risk assessment, suitable risk management options that ensure the prevention of human cases (or further cases) need to be put in place.[2]

Target

A functional system is in place for surveillance and response capacity of States Parties for foodborne disease and food contamination risks or events, with effective communication and collaboration among the sectors responsible for food safety.

Level of capabilities

South Africa has made giant strides in food safety systems with capacity to detect and respond swiftly to foodborne outbreaks or food contamination (chemical and microbiological). The presence of a well-established laboratory infrastructure makes it possible for enhanced laboratory analytical capacity to assign aetiology of foodborne diseases or origin of contamination events. A list of priority notifiable foodborne illnesses with case definitions has been developed and the existence of functional indicator-based surveillance (IBS) allows transmission of data from subnational level to national level. Upon analysis, there are feedback mechanisms with the production of a notifiable communicable diseases monthly bulletin which disseminates information on foodborne diseases. There is capacity at the national level to undertake rapid risk assessments of acute foodborne events but no evidence of such exists at the intermediate level.

South Africa has a National Policy Guideline for addressing food safety emergencies. The Guideline outlines procedures for managing food safety alerts and product recalls, and it includes several annexes. The Guideline document itself does not include definitions for thresholds for responding to food safety emergencies, however thresholds are established through the Foodstuffs, Cosmetics and Disinfectants Act 54 of 1972 and relevant legislation that sets regulatory limits, which are used to trigger a response. The country has a conceptual framework for food safety and alert notifications detailing a nexus of communication across different systems and focal points for food safety activities. These include the IHR National Focal Point, International Food Safety Authority Network Emergency Contact Point, World Organisation for Animal Health Focal Point, and focal points in various institutions with food safety mandates. The Multisectoral National Outbreak Response Team provides timely and operations response and strategic oversight for foodborne outbreaks.

Professionals are appointed as inspectors and can be easily upskilled to deal with ongoing, as well as new and emerging. risks and illnesses. The presence of food safety fora at the provincial and/or district level enables monitoring of food safety, best practices and collaboration, and cooperation across the food chain continuum across different sectors. The regulatory functions of food safety have been spread across different competent authorities, with clearly defined roles and responsibilities.

[2] Sources: Childhood Diarrhoeal Diseases in Developing Countries (https://www.sciencedirect.com/science/article/pii/S2405844020305351); Sanitation Standards; Guidelines for Investigation and Control of Foodborne Diseases; and Animal Health Biorisk Management Curriculum.

Indicators and scores

P6.1. Surveillance of foodborne diseases and contamination – Score 3

In their self-evaluation, the country assigned this indicator a score of 4 indicating there is capacity to undertake rapid risk assessments of acute foodborne events at the national and intermediate levels. However, no evidence was provided to show that this capacity exists at the intermediate level. Given this, the score of 3 was agreed upon by the external team of experts and the country team. The country has in place IBS and event-based surveillance (EBS) systems which include laboratory analyses to assign aetiology of foodborne diseases or origin of contamination events and investigation of hazards in foods linked to cases, outbreaks or events.

Strengths

- Food safety systems are in place with outbreak response teams composed of trained focal persons from relevant sectors and laboratories.
- There are food safety fora at provincial and/or district level to evaluate food monitoring, best practices, collaboration, cooperation and communication across different sectors.
- The country has well-established laboratory infrastructure.
- Inter-governmental relations and cooperation are enabled and ensured across the food chain continuum.
- A Food Safety Committee is present.
- Human resources are available across diverse ministries, departments and agencies.
- The Notifiable Medical Conditions app is used to report foodborne illnesses.
- There is a laboratory sample referral system.

Challenges

- Outbreak response teams are absent in some provinces.
- Occasionally turn-around time is delayed for laboratory testing and reporting.
- The scope of analytical testing may be insufficient to address new and emerging risks.

P6.2. Response and management of food safety emergencies – Score 4

The country team proposed a score of 4 indicating the existence of strategies and guidance in place for communicating with partners, stakeholders, the general public and international organizations. Given the evidence provided, the external team of experts agreed with the score of 4 as proposed. Areas for improvement include the need to regularly conduct simulation exercises to test existing foodborne emergency response plans, and the need to carry out regular intra-action reviews and after-action reviews following each event to document lessons learned and implement corrective actions. Expanding rapid response teams to all provinces is also strongly recommended.

Strengths

- South Africa is a member of international food safety networks such as the WHO International Food Safety Authorities Network (INFOSAN) and the European Union (EU) Rapid Alert System for Food and Feed (RASFF).
- The country is also a member of the WHO/Food and Agriculture Organization of the United Nations Codex Alimentarius Commission.
- The multisectoral and multidisciplinary coordinating mechanism involves competent authorities for food safety risks and emergencies.
- Focal points are established in all competent authorities and/or relevant departments.
- The industry is required by law to report any recalls to the National Department of Health.

- Existing legislation is based on the WHO/Food and Agriculture Organization of the United Nations Codex Alimentarius Commission Standards.
- An emergency response team exists for food safety events.

Challenges

- The Policy Guidelines on Food Safety Alerts and Food Product Recalls has shortcomings and needs updating; for example, there is no reference to the World Organisation for Animal Health focal point, contact list, etc.
- Intra-action reviews, after-action reviews and/or simulation exercises are not conducted regularly.
- Human and financial capacity constraints lead to insufficient monitoring of foodstuffs.
- A proliferation of counterfeit foods is creating the potential for risks due to illegal manufacturing.

Recommended priority actions

- Equip the health workforce with needed tools and skills to undertake rapid risk assessments of acute foodborne events at the national and intermediate levels through implementation of EBS.
- Establish a well-trained multisectoral rapid response team on foodborne event detection, reporting and response, with capacities for EBS across all provinces.
- Regularly conduct simulation exercises to test food safety emergency response plans and assess and review the response, collaboration and communication mechanisms.
- Regularly conduct intra-action and after-action reviews to document lessons learned following foodborne safety events and implement corrective actions to address any identified gaps.
- Conduct a comprehensive review of the Policy Guidelines for Food Safety Alerts and Food Product Recalls, draft updated guidelines, and possibly rename them.
- Increase testing and analytic capacity of network of laboratories for food safety including screening, with accreditation and quality management systems in place.

P7. Biosafety and biosecurity

Introduction

It is vital to work with pathogens in the laboratory to ensure that the global community possesses a robust set of tools — such as drugs, diagnostics, and vaccines — to counter the ever-evolving threat of infectious diseases.

Research with infectious agents is critical for the development and availability of public health and medical tools that are needed to detect, diagnose, recognize, and respond to outbreaks of infectious diseases of both natural and deliberate origin. At the same time, the expansion of infrastructure and resources dedicated to work with infectious agents have raised concerns regarding the need to ensure proper biosafety and biosecurity to protect researchers and the community. Biosecurity is important in order to secure infectious agents against those who would deliberately misuse them to harm people, animals, plants or the environment.

Target

A whole-of-government multisectoral national biosafety and biosecurity system with high-consequence biological agents identified, held, secured and monitored in a minimal number of facilities according to best practices, biological risk management training and educational outreach conducted to promote a shared culture of responsibility, reduce dual-use risks, mitigate biological proliferation and deliberate use threats, and ensure safe transfer of biological agents; and country-specific biosafety and biosecurity legislation, laboratory licensing and pathogen control measures in place as appropriate.

Level of capabilities

Laboratory biosafety and biosecurity is governed by several regulations under the purview of different national governmental departments. This includes the National Department of Health, DOA, Department of Employment and Labour and the Council for the Non-Proliferation of Weapons of Mass Destruction under the auspices of the Department of Trade Industry and Competition. The country has established the Regulations for Hazardous Biological Agents, Government Notice R1882 of 2022, which stipulates the classification of biological hazards, risk assessment, control measures and establishment of facility safety committees. Regulatory requirements are cascaded and domesticated from international treaties and regulatory frameworks through a number of national regulations under the auspices of various government departments. Africa has adopted or ratified the Biologicals and Toxins Weapon Convention, the United Nations (UN) Security Council Resolution 1540 (UN1540), and the IHR. South Africa played a leading role in the development of the Africa CDC Regional Biosafety and Biosecurity Legal Framework for African Union Member States, which aims to guide the implementation of legislation for biosafety and biosecurity in Africa Union Member State countries, and the development of the Africa CDC High-Consequence Agent and Toxins list for the Southern African Region.

There are requirements for the registration or approval of laboratories serving the human and animal health sectors through the respective government department and other bodies. The transfer of pathogens, materials that may contain pathogens, genetically modified organisms (GMOs) and biological samples (including but not restricted to blood, blood products, tissues, and gametes) requires transfer permits, which are issued in accordance with regulations governed by the respective government departments. In addition to regulatory controls, various national standards are available from the South African Bureau of Standards. These define the specifications for equipment (for example biosafety cabinets), and

personal protective equipment as well as for the safe transport of dangerous goods, including infectious substances. The South African National Accreditation System (SANAS) accredits laboratories to various standards including ISO15189 and 17025.

South African scientists have benefited from international and regional training opportunities, resulting in certified International Federation of Biosafety Association professionals in biorisk management (n=28), biosecurity (n=2), biosafety cabinet selection, installation and safe use (n=3), biocontainment facility design, operations and maintenance (n=2), cybersecurity (n=9), Africa CDC subject matter experts in biorisk management (n=4), and Africa CDC-certified implementers (n=4) and assessors (n=5) of the Africa Union Regulatory and Certification Framework for Institutions Handling High-Risk Pathogens. There is a regulatory requirement for training in all workplaces where hazardous biological agents may be encountered. There is extensive availability of biosafety and biosecurity training programmes at the national reference laboratories. In addition, the National Institute for Communicable Diseases established the Regional Diagnostic Demonstration Centre (RDDC), which is regarded as a state-of-the-art laboratory-based training facility. The RDDC was launched in 2022 and has conducted a number of regional trainings with participants from 45 countries. The RDDC is recognized as the Africa CDC Regional Centre of Excellence for Biosafety and Biosecurity servicing primarily the training and certification needs for the entire Southern Africa region. In addition, the National Institute for Communicable Diseases is leading the development of the regional professional certification programme training curriculum and professional capabilities matrices which are to be rolled out and run at all of the Africa CDC Regional Centres of Excellence.

Indicators and scores

P7.1. Whole-of-government biosafety and biosecurity system is in place for human, animal and agriculture facilities – Score 3

The country provided a self-assessment score of 3 for this indicator. The external team of experts agreed with the score indicating the country has conducted a legal assessment to determine gaps in the biosafety and biosecurity legal frameworks in the country, and an updated inventory of pathogens is available in institutions handling high-consequence pathogens.

Strengths

- Consolidation of high-consequence agents is maintained in a minimum number of facilities after extensive assessments using a biosafety level (BSL) checklist (Department of Agriculture, Forestry and Fisheries: BSL 3 form). Laboratories holding high-consequence pathogens are limited.
- The country has updated the regulations for hazardous biological agents R1887 of 2022 to include an updated list of biological agents, mitigation control measures and linkages with other relevant acts and regulations.
- A comprehensive legislative framework for laboratory biosafety and biosecurity and control of GMOs is available, with evidence of certain governance measures in place.
- A multisectoral Technical Working Group for Biosafety and Biosecurity is established with terms of reference and appointment by the National Department of Health.

Challenges

- Governance structures for existing regulations for biosafety and biosecurity are not adequately harmonized among government institutions.
- Resource allocation is inadequate to expand governance structures for existing regulations.
- Dual-use research of concern is not formally addressed by guidelines or regulations in the country.

P7.2. Biosafety and biosecurity training and practices in all relevant sectors (including human, animal and agriculture) – Score 4

The country team provided a score of 4 during their self-assessment, which was agreed upon by the external team of experts. The score of 4 indicates the country has established a training programme at the National Institute for Communicable Diseases, National Institute for Occupational Health (NIOH) and Agricultural Research Council-Onderstepoort Veterinary Research, that covers practitioners from public, private, academic and research laboratories on risk assessment and other aspects of biorisk management.

Strengths

- The country has access to a number of experts that have been certified by regional and international bodies in the field of biorisk management.
- Training is required by the regulations for hazardous agents R1887 of 2022.
- The Regional Centre of Excellence for Biosafety and Biosecurity is available to support in-country and regional trainings.

Challenges

- The country lacks a standardized curriculum for national training to support biosafety and biosecurity across sectors.
- The strategy and action plans for addressing accessibility of biosafety and biosecurity training in the country across sectors are inadequate.

Recommended priority actions

- Map stakeholders and resources for supporting the regulatory framework and governance structures for biosafety and biosecurity regulations in the country.
- Develop national biorisk management guidelines to support the implementation of national regulations for biosafety and biosecurity.
- Develop a standardized national biorisk management training curriculum based on the aforementioned guidelines to ensure access to standardized trainings.
- Develop strategies and action plans to address accessibility of biosafety and biosecurity training across sectors.

P8. Immunization

Introduction

Immunization currently prevents 3.5 million to 5 million deaths every year from diseases like diphtheria, tetanus, pertussis, influenza and measles. Immunization is typically one of the most successful and cost-effective ways to save lives and prevent disease.[3] Measles immunization is emphasized because it is widely recognized as a proxy indicator for overall immunization against vaccine-preventable diseases (VPDs). Countries will also identify and target immunization to populations at risk of other epidemic-prone VPDs of national importance (such as cholera, Japanese encephalitis, meningococcal disease, typhoid, and yellow fever). Zoonotic diseases such as anthrax and rabies are also included.

Target

A national vaccine delivery system — with nationwide reach, effective distribution, easy access for marginalized populations, adequate cold chain and ongoing quality control — that is able to respond to new disease threats.

Level of capabilities

South Africa sustainably procures its vaccines, and immunization services in the country are delivered through the private and public health sectors. Immunization is free for all in the public sector to improve access and equity but offered at a fee in the private sector. There are 13 antigens offered in the routine immunization schedule; these include childhood, adolescent, maternal and influenza vaccinations. The country has developed the National Immunization Strategy aligned with the Immunization Agenda 2030, but this is pending endorsement. There are well-established VPD and adverse events following immunization surveillance systems. Active case-based surveillance was introduced in 1997, and environmental surveillance was introduced in 2019. Monitoring of vaccine coverage is done through the District Health Information System (DHIS) and periodic Expanded Programme on Immunization coverage surveys. Statistics South Africa provides population estimates that are used as denominators for vaccine coverage and VPD surveillance performance-based indicators. With the COVID-19 vaccination programme the Electronic Vaccination Data System was introduced, which is a digital platform used in both the private and public sectors.

A cold chain audit was conducted to assess the adequacy of the cold chain prior to COVID-19 vaccine introduction, resulting in the distribution of cold chain equipment such as fridges, walk in cold rooms, cold boxes, vaccine carriers and remote temperature monitoring devices to fill in identified gaps. The country reports no gaps in cold chain equipment currently. A behavioural and social drivers study was conducted to inform improvement in service delivery and coverage. There are ongoing efforts in community mobilization and engagement to facilitate reaching every child with needed vaccines. Despite continuous efforts and systems in place to improve immunization service delivery and vaccination uptake, measles vaccine coverage is still below the global and regional elimination target of 95%. The national coverage for measles-containing vaccine second-dose (MCV2) in 2023 was 84% versus a target of 95%. Several intra-departmental directorates support the immunization programme, such as the Integrated School Health Program, Communication Unit, Heath Promotion Unit and Communicable Disease Control Unit, as well as partner agencies including WHO, the United Nations Children's Fund (UNICEF), the South African Vaccine Initiative Consortium, vaccine suppliers and the National Institute for Communicable Diseases.

[3] Sources: Vaccines and Immunization (https://www.who.int/health-topics/vaccines-and-immunization); World Health Organization Immunization Data Portal - Global (https://www.who.int/data/gho/data/themes/immunization).

Regarding best practices for immunization, the National Treasury allocates a budget for procurement of all routine vaccines based on estimates of funds needed by the provinces; every day is an immunization day in primary healthcare facilities; there is regular analysis of routine immunization data (monthly, quarterly and annually) for decision making; a procedure for rapid approval of off-label, new, non-registered, and/or experimental vaccines exists; the MomConnect App is in use with an electronic follow-up system to remind mothers of their children's immunization schedule; all batches of vaccines arriving in the country are tested before being released to the market; there is a collaboration between national, provincial, and district levels on adverse events following immunization surveillance; the country has developed a MedSafety App for adverse events following immunization reporting by both the public and private healthcare workers; and regular programme performance monitoring and feedback data is illustrated and disseminated using dashboards and bulletins.

Inability to reach all children and/or a coverage of at least 95% of children with measles-containing vaccine (MCV) remains a challenge due to vaccine hesitancy, drop-outs and inadequate community engagement. The Reach Every District strategy is not implemented in all provinces. Currently the country's national immunization strategy has been developed but has not been endorsed. Additionally, there is need for a coordination mechanism for partners/stakeholders at national and subnational levels to regularly review and address identified gaps. Additional behavioural qualitative studies are needed to understand the community perspectives that are driving vaccine hesitancy, and community co-designed innovative interventions need to be implemented to reach all missed children.

Indicators and scores

P8.1. Vaccine coverage (measles) as part of national programme – Score 3

A score of 3 was agreed upon, consistent with the country's self-assessment, given that 70–89% of the country's 12-month-old population has received at least one dose of MCV, as demonstrated by Expanded Programme on Immunization coverage surveys (81%) and administrative data. A Reaching Every District (RED) strategy and Zero Dose plan are in place and their implementation will be intensified to achieve 95% coverage within the next three years. It has also been recommended that the country intensify community engagement strategies to address vaccine hesitancy in some communities and minimize drop-out rates.

Strengths

- The country benefits from self-procurement of vaccines and thus sustainability of vaccine availability.
- Free immunization is accessible for all in the public sector.
- Systems and mechanisms exist for media monitoring, social listening online and community feedback through risk communication and community engagement (RCCE).
- District health management information systems, policies, standard operating procedures and tools are available for data collection and analysis.

Challenges

- No standardized defaulter/reminder tracking system exists and the country lacks a patient-level electronic immunization register.
- There are no standardized facility micro-plans and implementation of the RED Strategy is inadequate.
- Suboptimal data quality exists across all levels.
- Vaccine hesitancy in some communities hinders reaching every child with needed vaccines.
- Supplementary immunization activities and periodic intensification of routine immunization to close immunity gaps are not conducted routinely.

P8.2. National vaccine access and delivery – Score 4

Given the availability of functional cold chain equipment in all relevant facilities, as well as procurement and adequate distribution of vaccines, a score of 4 was agreed upon for this indicator, consistent with the country's self-assessment. Additionally, vaccine delivery is available in 60–79% of districts and to 60–79% of the target population in the country. Functional vaccine procurement and forecasting takes into account global stocks, preventing stock-outs at the central level, with rare stock-outs at the district level that remain within the government's control.

Strengths

- Legislation or legal framework is available to ensure continuous cold chain supplies and management.
- The National Treasury allocates a budget for procurement of all routine immunization vaccines.
- Vaccine delivery is available in all provinces within the country. WHO-approved vaccine cold chain equipment is available and used in all districts.
- A total of 10 provincial vaccine depots exist in nine provinces. As these depots are always adequately stocked, stock-outs at provincial and district levels are avoided.
- A stock visibility system is used to monitor stock availability in most health facilities.

Challenges

- No maintenance plan exists for cold chain equipment in some facilities.
- Use of stock visibility systems in some facilities is limited due to unavailability of official mobile devices and data, which sometimes leads to stock outs at the health facilities.

P8.3. Mass vaccination for epidemics of VPDs – Score 4

A score of 4 was agreed upon by the external team of experts and the country team, consistent with the country's self-assessment, indicating a national plan for mass vaccination response to outbreaks of VPDs, including national guidelines for regulatory approval and acquisition of new and experimental vaccines, and relevant standard operating procedures are disseminated and implemented at all levels (i.e., national, intermediate and local). The country has conducted several supplementary vaccination campaigns to close gaps in vaccine coverage and has mass vaccination plans for outbreaks of polio, measles, COVID-19, etc. standard operating procedures for the campaigns are disseminated and implemented at all levels. Guidelines for approval of new, off-label or experimental vaccines are available, facilitating rapid deployment of new vaccines such as novel Oral Polio Vaccine type 2 (nOPV2), COVID-19 and mpox. However, operational costs, along with inadequate communication and community engagement, hamper the attainment of targeted coverage in the supplementary immunization campaigns.

Strengths

- Section 21 of the Medicines and Related Substances Act, 1965 (Act 101 of 1965) provides for emergency authorization and fast-tracking the authorization and use of emergency vaccines.
- The South African National Control Laboratory for Biological Products ensures that all vaccines for human use meet the quality standard as registered by the South African Health Products Regulatory Authority before being released to the market.
- Adverse events following immunization surveillance is well-established and functional at the national, provincial, district and facility levels.

Challenges

- Insufficient operational costs for mass vaccination campaigns.
- Vaccination coverage is inadequate in most supplementary immunization campaigns due to operational costs and vaccine hesitancy.

Recommended priority actions

- Strengthen community engagement using innovative approaches (community dialogues, co-design of vaccination plan with communities, etc.) to enhance vaccine coverage for both routine and supplementary immunization.
- Strengthen coordination mechanisms with stakeholders at all levels including the establishment of an immunization technical working group.
- Develop an electronic immunization register and defaulter tracking system.
- Endorse and implement the National Immunization Strategy and implement the Reaching Every District strategy in all provinces.
- Establish and implement service level agreements with private service providers in the remaining provinces.

Detect

D1. National laboratory system

Introduction

Public health laboratories provide essential services including disease and outbreak detection, emergency response, environmental monitoring, and disease surveillance. State and local public health laboratories can serve as a focal point for a national system, through their core functions for human, veterinary and food safety, including disease prevention, control and surveillance; integrated data management; reference and specialized testing; laboratory oversight; emergency response; public health research; training and education; and partnerships and communication.

Target

Surveillance with a national laboratory system, including all relevant sectors, particularly human and animal health, and effective modern point-of-care and laboratory-based diagnostics.

Level of capabilities

South Africa established the National Health Laboratory Service in 2001 through the National Health Laboratory Services Act, 2000 which provides mandates for laboratory services provision across South Africa. It is mandated to offer cost-effective and efficient health laboratory services to public sector healthcare providers, support and conduct health research, and provide training for health science education. The National Department of Health and provincial health departments are responsible for ensuring smooth healthcare delivery.

The National Health Laboratory Service includes specialized divisions such as the National Institute for Communicable Diseases for infectious disease intelligence, the NIOH, the National Cancer Registry, and the Antivenom Unit within the South African Vaccine Producers, the sole producer of antivenom for snake, spider and scorpion bites in southern Africa.

The National Health Laboratory Service serves over 80% of the population through a national network of 215 laboratories, employing approximately 8500 people. It operates in all nine provinces, with 137 (64%) of its laboratories accredited by the SANAS for meeting International Quality Assurance Standards.

All veterinary laboratories must be registered by the South African Veterinary Council. Additionally, if a veterinary laboratory conducts testing for controlled and notifiable animal diseases, the laboratory and test method must be SANAS accredited (ISO/IEC 17025) and Directorate Animal Health-approved through routine audits and supervisions.

A specimen referral system is in place to support access to diagnostic services at all levels; however, the available system needs to be evaluated for effectiveness. There is a need to conduct mapping of diagnostic capacity for animal health laboratories.

Indicators and scores

D1.1. Specimen referral and transport system – Score 4

The consensus score is 4 which is consistent with the country's self-assessment score, indicating that specimen referral is systematically organized for diagnostic/confirmation of priority diseases for human and animal health laboratories.

Strengths

- The National Health Laboratory Service has developed a functional, nationwide specimen referral system which is delivered through a hybrid service delivery model directly, by National Health Laboratory Service systems, and indirectly, through the use of contracted couriers.
- There is a defined network of laboratories to ensure that travel time of specimens is reduced.
- The specimen referral and transport system is fully financed by the Government of South Africa for human health laboratories. For animal health laboratories, the specimen referral and transport system for priority controlled animal diseases is financed by the Government.
- The National Health Laboratory Service is able to monitor laboratory test volumes electronically through the CDW Healthcare® System and TrakCare by test type, geographical location and other demographic information.

Challenges

- There is no dashboard for real-time viewing of laboratory data and test volumes on priority disease testing that would allow monitoring of changes over time as a public health indicator.
- The national policy for specimen transport logistics is not finalized; in the interim laboratory standard operating procedures detail the laboratory-specific logistics.
- Mapping of diagnostic capacity for animal health laboratories is needed.

D1.2. Laboratory quality system – Score 4

The consensus score is 4, consistent with the country's self-assessment score, indicating national quality standards have been developed and are being implemented at national and intermediate levels in human and animal health laboratories. Accreditation to ISO 17025 is one of the mandatory requirements for an animal health laboratory to be approved to test controlled and notifiable animal diseases.

Strengths

- The National Health Laboratory Service has well-developed quality assurance mechanisms which include internal processes (routine National Health Laboratory Service audits) and external processes (SANAS, which is aligned with ISO standards).
- In total, 100% of national central laboratories are accredited by SANAS and have achieved ISO certification (ISO 15189:2012); fewer laboratories at provincial and district levels have achieved accreditation.
- There are 36 proficiency-testing schemes in operation across the country supported by the National Health Laboratory Service, which are available to laboratories in 24 countries.
- Implementation of ISO/IEC 17025 standards (SANAS accreditation) is mandatory for veterinary laboratories in order to receive Directorate Animal Health approval to test for controlled and notifiable animal diseases.

Challenges

- There is no clear policy nor guidelines for mandatory licencing and registration of public health laboratories in human health (except for microbiology laboratories).
- The number of auditors in Directorate Animal Health is insufficient to support quality management system audits in all animal health laboratories across the country.

D1.3. Laboratory testing capacity modalities – Score 5

The consensus score is 5, consistent with the country's self-assessment score, indicating all laboratories have access to diagnostic capacities ranging from point-of-care services to molecular, whole genome and metagenomics capabilities in human and animal health laboratories. The diagnostic system has been reviewed and tested through a number of outbreaks reported in the country.

Strengths

- South Africa has an advanced, publicly funded national health laboratory system with effective linkages to clinical care.
- The National Institute for Communicable Diseases, which is part of the National Health Laboratory Service system, is the most advanced biomedical laboratory in the country and continues to review and upgrade their testing capacities.
- There are 36 proficiency-testing schemes established across the country with well-established systems for quality assurance.
- All emerging outbreaks within the country were detected using the laboratory testing capacity within South Africa.
- South Africa has a well-developed veterinary laboratory system that consists of both government and private laboratories.

Challenges

- South Africa lacks a consolidated national laboratory diagnostic testing algorithm for some diseases.
- There is a lack of funding and strategies to strengthen laboratory information and communication technology infrastructure, data security and backup for laboratory information systems.
- Surge capacity of the veterinary laboratory system is insufficient due to limited resourcing and support (government laboratories).

D1.4. Effective national diagnostic network – Score 4

The country's self-assessment score was 5. The discussions during the JEE supported the score of 5 for human health with a defined laboratory national diagnostic testing network that has been reviewed and evaluated in public and private sectors. However, animal health was given a score of 4, indicating that tier-specific diagnostic testing capacity is well established at the national and provincial levels, but the provision of a defined diagnostic testing network mapping is not readily available nor user-friendly to navigate for public and private entities. Using a One Health approach, the final overall agreed score was 4, which was the lowest score among the human and animal health capacities for this indicator.

Strengths

- Veterinary laboratories that have been approved by Directorate Animal Health and accredited by SANAS are allowed to test for controlled and notifiable animal diseases.
- Human health laboratories in public and private sectors have defined diagnostic testing structures ranging from primary health care to national level laboratories.
- A well-developed human health private sector laboratory testing framework has been established and implemented.

Challenges

- There is inadequate access to and coverage of veterinary laboratory services.
- Scale up of national strategies is inadequate for tier-specific diagnostics for point-of-care testing for diagnosis of priority diseases.
- There is limited manufacturing capacity for in-vitro diagnostics in-country.

Recommended priority actions

- Develop a strategy for improving information and communication technology infrastructure to ensure backup and data security across sectors.
- Develop a national integrated database of human and animal diagnostic laboratories including point-of-care testing capacities.
- Finalize the strategy for electronic laboratory diagnostic testing handbooks to improve turnaround time and referral systems in human health.
- Map laboratory diagnostic testing capacity for animal health laboratories to improve the tier diagnostic and referral mechanism.

D2. Surveillance

Introduction

The purpose of real-time surveillance is to advance the safety, security and resilience of the nation by leading an integrated surveillance effort that facilitates early warning and situational awareness of all IHR hazard-related events.

Target

(1) Strengthened early warning surveillance systems that are able to detect events of significance for public health and health security; (2) improved communication and collaboration across sectors and between national, intermediate, and primary public health response levels of authority regarding surveillance of events of public health significance; and (3) improved national and intermediate level capacity to analyse data. This could include epidemiological, clinical, laboratory, environmental testing, product safety and quality, and bioinformatics data; and advancement in fulfilling the core capacity requirements for surveillance in accordance with the IHR.

Level of capabilities

The surveillance systems in South Africa play a vital role in early detection of public health events in the human and animal sectors. The country's human health sector has a surveillance system for notifiable medical conditions that are of public health importance. Notifiable medical conditions was legislated by the National Health Act, 61 of 2003 in South Africa and Regulations Relating to the Surveillance and the Control of Notifiable Medical Conditions of 2017. However, the notifiable medical conditions surveillance system does not collect comprehensive demographic data (such as education, income or disability), limiting the analysis of health disparities. In addition, there are gaps in completing the Health Patient Registration Number on the notification form.

Notably, there are several parallel systems used to report various diseases, such as Tier.net for HIV/tuberculosis (TB) and the Electronic Drug-Resistant Tuberculosis Register (EDR) for drug-resistant TB. The country is in the process of implementing the IDSR Strategy, which aims to improve public health surveillance by integrating existing surveillance systems for early detection and rapid response to priority diseases, conditions and events, at the community, health facility, district, provincial and national levels. Data sharing between sectors such as human and animal health exists but is limited due to the absence of a formal agreement outlining information exchange protocols.

The animal health sector has a list of controlled and notifiable animal diseases, as defined in the Animal Diseases Act (Act No. 35 of 1984), that are reported to animal health authorities. The animal health sector does not have a mandatory electronic reporting platform for controlled and notifiable diseases. The provinces have different electronic systems and the national level has not prescribed a system but has rather developed interfaces to allow for easy data transfer.

Indicators and scores

D2.1. Early warning surveillance function – Score 3

The country's self-assessment score for this indicator was 3, which was agreed upon during the JEE. South Africa's early warning surveillance system includes IBS and EBS in alignment with the IDSR Strategy.

However, EBS is only partially implemented.

Strengths

- Legislation is available for both human and animal health sectors on notifiable conditions and diseases.
- Electronic case-based systems provide immediate reporting and generate weekly and monthly reports that are submitted to the WHO Regional Office for Africa. They include functional laboratory surveillance systems and clinical hotlines, which serve as early warning systems to promptly identify and respond to potential health threats.
- There is a focus on building capacity among managers for the effective implementation of early warning surveillance systems. This involves training and supporting managers to ensure they have the skills and knowledge needed to effectively use and manage these systems.
- Strong commitment is evident from provincial authorities, as well as collaboration with WHO, the National Institute for Communicable Diseases, animal health and other stakeholders. This commitment ensures coordinated efforts and support in the implementation and operation of health surveillance systems.
- Animal health surveillance is provincialized, allowing early detection and response at provincial and local levels.

Challenges

- Surveillance systems are not fully integrated, which limits the ability to consolidate and analyse data across different health programmes and sectors (that is, human, animal and environment). This lack of integration can delay timely and coordinated responses to public health events.
- Financial limitations affect the ability to fully implement and sustain surveillance systems.
- There is a shortage of personnel to manage and operate the surveillance systems effectively. This lack of adequate human resources can impede the proper functioning and utilization of these systems.
- Some of the national surveillance guidelines are outdated and may not reflect current best practices or technological advancements. This has resulted in inefficiencies and gaps in the surveillance process, affecting overall health monitoring and response efforts.
- Animal health surveillance is provincialized; therefore, reports are captured in different formats across the provinces. These reports must then be submitted in a prescribed format to the national level where the information is entered into the World Animal Health Information System platform for submission to the World Organisation for Animal Health. A standardized surveillance data platform that can be applied to all provinces would help streamline national level reporting.

D2.2. Event verification and investigation – Score 4

The score from the country's self-assessment was 3; however, consensus was reached on a score of 4 during the JEE. Diseases and conditions are detected at the community and facility levels. Case definitions and management guidelines are provided within the National Institute for Communicable Diseases disease index. Immediate response includes managing and accessing the clinical situation and notification to the Communicable Disease Control surveillance coordinator, who then notifies district, provincial and national levels. For animal health, diseases or conditions are detected by farms, animal owners or veterinary clinics and managed at the state veterinary district level (local level). Table 2 of the Animal Diseases Regulations (R.2026 of 1986) describes the basic control measures required for controlled animal diseases, which is further detailed in official Veterinary Procedural Manuals, standard operating procedures, guidelines, etc.

Strengths

- When a triggering event occurs, South Africa has the ability to issue timely alerts to various individuals who are deemed relevant to the situation, ensuring that all necessary parties are informed simultaneously and enabling a coordinated response.

- The system is interconnected with both public reference diagnostic laboratories and private laboratories, facilitating the verification or confirmation of events.
- The country has a robust and large network of laboratories, which enhances their capability to conduct thorough verification and confirmation within the system. This extensive laboratory infrastructure ensures that they have the capacity to effectively manage and address public health events, providing accurate and reliable results.
- The information flow from the animal sector is from private veterinarians, animal owners and members of the public to the local animal health technicians or state veterinarian, who reports to the Provincial Director of Veterinary Services and then to the Directorate Animal Health Director. Samples are collected by animal health technicians, state veterinarians or private veterinarians and sent to SANAS-accredited and Directorate Animal Health-approved laboratories for verification of controlled and notifiable animal diseases. Veterinary laboratory capacity is well-established, although it is not as extensive and well-capacitated in comparison with human health laboratories.

Challenges

- The process for event verification for EBS currently lacks standardization, which can lead to inconsistencies in how events are managed and verified across different regions.
- Training programmes designed for event management do not always effectively cascade down to all levels due to various challenges, resulting in knowledge gaps at lower levels.
- The reliance on a paper-based notification system or non-standardized electronic systems, contributes to delays in issuing timely alerts and hinders the efficiency of the overall response in animal health.
- There is no official appointment of dedicated teams or staff responsible for event verification and investigation of public health events.
- There is inadequate capacity and resourcing of veterinary services in the country to sustain and improve event verification and investigation.

D2.3. Analysis and information sharing – Score 4

Analysis of data is descriptive by person, place and time, including epi-curves, descriptive tables and maps. Factors associated with infection or specific outcomes are not routinely analysed. Disease transmission modelling, geospatial modelling and time-series analysis are not conducted, limiting decision-making capability. Healthcare workers are trained to analyse data through the South African Field Epidemiology Training Programme, which runs frontline, intermediate and advanced tiers of training.

Strengths

- South Africa possesses strong analytical capacity at the national level, allowing it to produce valuable information that guides and informs policy decisions. For example, the National Department of Health, in collaboration with the National Institute for Communicable Diseases, regularly produces bulletins for various surveillance activities and disease-specific programmes, such as respiratory pathogens surveillance reports, notifiable medical conditions surveillance reports, and SARS-Cov-2 wastewater surveillance reports.
- During the height of the COVID-19 pandemic, provincial health departments and different institutions including the South African Centre for Epidemiological Modelling and Analysis and Kwazulu-Natal Research Innovation and Sequencing Platform, were involved in producing various analyses to inform the national response to the pandemic. These efforts provided critical insights and guidance for managing the pandemic effectively.
- Through the South African Field Epidemiology Training Programme , frontline and intermediate training are available to build healthcare worker capacity at lower levels, ensuring that healthcare professionals are well-equipped with the necessary skills and knowledge to manage public health challenges effectively at the grassroots level.

Challenges

- Current analytical capacity is limited at the subnational level.
- Information products are not shared with other stakeholders to ensure a comprehensive understanding and response to public health issues.
- There is inadequate adaptation of a One Health approach in surveillance which would strengthen the integration of human, animal and environmental health, promoting a more holistic and effective strategy for managing health threats.
- The country lacks a single information product or bulletin that encompasses data from various sources, such as sentinel reports, EBS reports and IBS reports.
- Veterinary services epidemiological capacity is inadequate.

Recommended priority actions

- Advocate for and develop a formalized system for disease surveillance information exchange across human, animal and environmental health sectors.
- Advocate for additional funding for the implementation of the IDSR strategy.
- Implement IDSR, including review of guidelines and expansion of core IBS and EBS systems, extending coverage to all relevant public and private health facilities, and other relevant healthcare providers.
- Integrate information from multiple sources, various information products and reports into one bulletin (i.e. data/information from sentinel, EBS and IBS reports).
- Employ trained staff at all levels as required for human and animal health surveillance systems.

D3. Human resources

Introduction

Human resources are important in order to develop a sustainable public health system over time by developing and maintaining a highly qualified public health workforce with appropriate technical training, scientific skills and subject-matter expertise. Human resources include nurses and midwives, physicians, public health and environmental specialists, social scientists, communication, occupational health, laboratory scientists/technicians, biostatisticians, IT specialists and biomedical technicians, and a corresponding workforce in the animal sector, such as veterinarians, animal health professionals, para-veterinarians, epidemiologists and IT specialists.

The recommended density of doctors, nurses, and midwives per 1000 population for operational routine services is 4.45 plus 30% surge capacity. The optimal target for surveillance is one trained (field) epidemiologist (or equivalent) per 200 000 population who can systematically cooperate to meet relevant IHR and Performance of Veterinary Services core competencies. One trained epidemiologist is needed per rapid response team.[4]

Target

States Parties with skilled and competent health personnel for sustainable and functional public health surveillance and response at all levels of the health system and the effective implementation of the IHR (2005).

Level of capabilities

The country is implementing a 10-year (2020–2030) Human Resources for Health (HRH) Strategy. The strategy was developed following a detailed analysis of the health workforce, including labour market analysis. The average health worker density per 100 000 in the public sector was reported as 503. Nurses make up the majority of the workforce at 56% followed by community health workers at 22%. There are significant inequalities and variations in the distribution and density of health workers in different geographic localities, with Mpumalanga Province reporting the lowest densities among four categories (nursing assistants, pharmacists, radiographers and physiotherapists). In the Western Cape Province, there are 26 medical specialists per 100 000 public sector population, which is in stark contrast to Limpopo Province which only has 1 specialists per 100 000 public sector population. In addition, the country has established a Health Workforce Consultative Advisory Forum comprised of members from government, private and health professional councils. This forum serves as an advisory body on matters related to health workforce needs.

While the current HRH strategy took into account the multidisciplinary approach to service provision, certain categories do not feature prominently, or they do not receive specific recognition. Hence it will be necessary to adopt a multisectoral approach to the HRH strategy to include a component of the IHR and outbreak response-relevant health workers, in order to identify and pool appropriate resources and technical capacities, and to ensure optimization and efficient use of resources and avoidance of duplication, confusion and uncoordinated, disjointed emergency response.

[4] Health Workforce Requirements for Universal Health Coverage and the Sustainable Development Goals (Human Resources for Health Observer, 17) (https://iris.who.int/bitstream/handle/10665/250330/9789241511407-eng.pdf); World Health Organization Global Health Observatory Health Workforce (https://www.who.int/data/gho/data/themes/health-workforce); One Field Epidemiologist per 200 000 Population: Lessons Learned (http://dx.doi.org/10.1089/hs.2019.0119).

Regarding availability of human resources to support implementation of IHR (2005), the country has not conducted mapping of appropriate human resources required; however, there exists a field epidemiology training programme covering basic, intermediate and advanced training. For workforce training, the country has increased the number of medical schools from eight to 10, including utilization of an e-learning platform for in-service training of the health workforce. In addition, there is continuous professional education and the South African Qualification Authority which provides oversight of standards for training of professionals.

Moreover, many lessons were learned from the country's response to the COVID-19 pandemic with regard to human resource management, including the need for conducting critical workforce and competency assessments in public and private sectors, as well as at community level, across the continuum of care; building capacity, providing training and job aides using appropriate methodologies and platforms; addressing regulatory barriers and scopes of practice limitations where needed; identifying health workforce gaps through ongoing monitoring of supply and demand during the management of the health emergency; recruitment of additional health personnel to close identified human resource gaps on pre-determined short-term contracts and on a permanent basis (prioritizing the filling of vacant posts); mobilizing additional budgets to support the recruitment of additional capacity for both temporary and permanent appointments; issuing directives by the National Department of Health to shorten recruitment timeframes; making provisions for overtime and removing overtime capping if necessary; tapping into the capacities available in the private sector to augment the public response capacities and mobilize retiree medical workers, medical and nursing students; and relaxing regulatory registration requirements to allow engagement of additional health workers to augment response during crises and pandemics.

Indicators and scores

D3.1. Multisectoral workforce strategy – Score 2

The host country's self-assessment yielded a score of 2 which was agreed upon by the external team of experts. The country has a workforce strategy covering the health cadres, which aligns with a score of 2. A score of 3 wasn't possible due to the required confirmation of the availability of a multisectoral health workforce strategy, including all relevant sectors and cadres of public health professionals.

Strengths

- A 10-year HRH strategy exists and is aligned with a nursing strategy that has been endorsed and has political buy-in from leadership.
- The current strategy extends to 2030, projecting forward planning and providing an opportunity for ongoing monitoring.
- Labour market analysis was undertaken as part of the development of the strategy.
- The National Department of Health is a key participant in the process of developing the scarce skills list, led by the Department of Home Affairs.

Challenges

- There is limited inter-departmental collaboration across relevant sectors.
- There are limited financial resources to facilitate the implementation of all aspects of the HRH strategy as costed.

D3.2. Human resources for implementation of IHR – Score 3

The country's self-assessment recommended a score of 4. It was agreed that appropriate human resources are available in all relevant sectors at national and intermediate levels in the various technical areas. However, human resources are inadequate at local levels. As a result, upon review by the country team and external team of experts, the score was reduced to 3.

Strengths

- Epidemiologists are appointed at national and up to the provincial level.
- The field epidemiology training programme provides training on basic and intermediate epidemiology programmes.
- There is collaboration with other sectors on specific outbreaks responses such as rabies.
- Regulations are in place to supplement the Disaster Management Act, 2002 (signed April 2020) to facilitate recruitment and deployment of health workers.
- Bilateral agreements are available to facilitate recruitment of foreign health workforce.

Challenges

- The country lacks an approved and funded structure for epidemiologists, limiting their distribution particularly to district levels.
- The human resource information system is inadequate to cover the private sector.

D3.3. Workforce training – Score 1

The country's self-assessment scored its capacity at level 4, however mapping of required competencies has not been conducted, which is a requirement for a score of 2. Since this requirement was not fulfilled, it was agreed to lower the score to 1 to allow the host country to address the gaps identified for level 2 requirements.

Strengths

- Formal collaboration exists with the Department of Higher Education Training on health science education and training.
- South African training institutions are accredited and offer globally-recognized qualifications.
- There is an annual statutory placement programme for medical interns and community service personnel.
- The number of medical schools has increased from eight to 10.
- There is a broader clinical training platform with more bedside exposure, including accredited simulation laboratories.
- A knowledge hub e-learning platform exists which promotes increased participation and cost-effective in-service training, reducing travel and accommodation costs.

Challenges

- The number of medical schools offering veterinary training is in decline, thus limiting the number of graduating veterinarians each year.
- There is misalignment of the production of and demand for mid-level workers in relation to the HRH strategy (such as clinical associates).
- Poor absorption capacity exists for health professionals (graduates) mainly because of financial constraints.

D3.4. Workforce surge during a public health event – Score 1

The country's self-assessment scored its capacity at 2; however, it was observed that a score of 2 required the country to have done gap analysis for surge workforce and also required a developed national multisectoral surge strategic plan. Neither the report on gap analysis nor the national multisectoral strategic plan were available, thus it was agreed to maintain a score of 1 in order for the host country to address the existing gaps identified in the score 2 requirements.

Strengths

- The workforce surge plan prepared in response to the COVID-19 pandemic provides a base for developing a more comprehensive and broader surge plan.
- The National Department of Health's Pandemic Preparedness and Response Plan is inclusive of the health workforce.
- Inter-governmental agreements have been established for rapid deployment of staff to South Africa and also to other countries to offer response support.
- Support is available through partners.
- The National Health Emergency Response Operations Plan is being implemented.

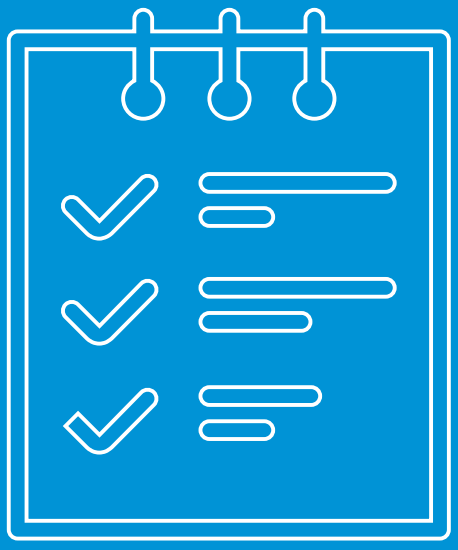
Challenges

- Limited inter-departmental collaboration exists with other relevant sectors.
- The country lacks an approved and funded structure for epidemiologists, limiting their distribution, particularly at district level.
- There is a lack of institutionalization of epidemiology with a clear career trajectory within the public service, including at primary public health levels.

Recommended priority actions

- **Collaborate with other relevant sectors to review and update health workforce strategy to establish a multisectoral health workforce strategy.**
- Fast-track the institutionalization of the specialization of epidemiology, with a clear career trajectory within the public service, including the primary public health levels, following a One Health approach.
- **Conduct mapping of required workforce competencies and implement regular and routine competency-based training programmes through a One Health approach covering all professions and cadres in human health, animal health, agriculture, disaster management, food safety, livestock, fisheries, trade, international transport, POE, emergency services, environment, finance, chemical safety, radiation safety, labour, education, foreign affairs, civil society and other sectors at the national and intermediate levels.**
- Conduct gap analysis for surge workforce required in all sectors for emergencies (e.g., security, human health, animal health and environment) and develop and implement a surge workforce development strategic plan.

Respond



R1. Health emergency management

Introduction

This capacity focuses on management of health emergency and systems for enabling countries to be prepared and operationally ready for response to any public health event, including emergencies, as per the all-hazard requirement of the IHR. Ensuring risk-based plans for emergency preparedness, readiness and response, robust emergency management structures, and mobilization of resources during an emergency is critical for a timely response to public health emergencies.

Target

(1) Existence of national strategic multi-hazard emergency assessments (risk profiles) and resource mapping. (2) Existence of emergency readiness assessment. (3) Development of national health EOC81 plans and procedures. (4) Establishment of an emergency response coordination mechanism or incident management system. (5) Evidence of at least one response to a public health emergency within the previous year that demonstrates that the country sent or received medical countermeasures and personnel according to written national or international protocols. (6) Existence of an emergency logistic and supply chain management system/mechanism. (7) Existence of policies and procedures for research, development and innovation for emergency preparedness and response.

Level of capabilities

South Africa has intergovernmental and allied health emergency structures in place that are used to monitor public health emergencies and activate intersectoral responses when necessary. The national, provincial and local government health system tiers have comparable disaster management structures for emergency coordination in place with roles and functions aligned to their administrative sphere of authority. The National Department of Health has conducted a multisectoral risk profiling at the national level and in two out of nine provinces in the country during the previous two years, with the plan to expand the exercise to the remaining provinces. As a result of the risk profiling, the department developed a National Health Emergency Response Operations Plan, however it is still in a draft format. The country has functional disaster management centres at national and intermediate levels where all departments are expected to report through an Early Warnings and Capability Management Systems directorate any public health threats as mandated by the Disaster Management Act. Sector departments are also expected to monitor public health threats through their surveillance systems. The National Department of Health is operating two public health emergency operations centres (PHEOCs): one is at the National Department of Health premises, responsible for all health-related hazards, and the other at the National Institute for Communicable Diseases, with substantial staffing, responsible for communicable disease events. The relevant directorates are expected to perform their functions as mandated to support the PHEOCs during the time of activation. In addition, there is an established Public Health Emergency Coordination Committee with clear terms of reference to coordinate the response activities.

The multisectoral risk assessment conducted identified seven high-risk hazards (cholera, civil unrest, COVID-19 emergence of new variants, fires, floods, storms and transportation accidents). Among these, responses to five of the seven hazards would be coordinated at disaster management centres and National Joint Operations where sector departments through relevant directorates, are expected to share

their preparedness/response plans and reports on the public health event. This is because the Disaster Management Committee's mandate is to develop and oversee the implementation of all response and recovery strategies and projects following a disaster, in an integrated and developed manner.

The country is implementing a national health research plan during 2021–2024 with 2% of the national budget allocated for health research. Various government departments have the operational budgets to fund public health emergency preparedness and response activities. There is also an established system for accessing disaster funding for public health emergencies and regular monitoring of emergency supplies across all levels in addition to the operational budget.

Despite the demonstrated capacity on emergency medical supply chain management, and research, development and innovation, the country should consider reviewing, evaluating and updating the emergency logistics and supply chain management system/mechanism on a regular basis at national and intermediate levels. This should include streamlining the incident management system approach with the PHEOC, strengthening the subnational capacities to coordinate and respond to public health emergencies in a timely manner, and devising a mechanism to fast-track the development and approval of the mechanisms. Also, the National Department of Health should consider harmonizing the two PHEOCs with a clear mandate to optimize their utilization for public health emergency coordination.

Indicators and scores

R1.1. Emergency risk and readiness assessment – Score 3

Strengths

- The country has conducted risk profiling at national level using the WHO Strategic Tool for Assessing Risks in 2022 and the final report was signed off by the Director General of Health on 23 September 2022.
- The National Health Emergency Response Operations Plan and contingency plans for high risks have been developed.
- The Public Health Emergency Coordination Committee Terms of Reference for a multisectoral committee to manage public health emergencies exist.
- A 10-year national strategy for public health security and emergencies is in place.
- Risk and vulnerability assessments for extreme weather events were conducted in all provinces and districts in the country.

Challenges

- Lack of hazard/risk profiling at provincial level.
- The Public Health Emergency Coordination Committee has been established, and the National Health Emergency Response Operations Plan contingency plans and strategy developed, but both still require endorsement by the Director General for Health.
- National plans need to be adapted to provincial and district levels.

R1.2. Public health emergency operations centre (PHEOC) – Score 3

Strengths

- The establishment of the National PHEOC has been completed with PHEOC handbook and standard operating procedures, however in draft format.
- PHEOCs across the country have received full support from the Minister of Health and Director General for Health.
- High-level executive management at the Deputy Director General level has overseen the establishment of PHEOCs.

- A designated site for the national PHEOC has been procured, along with the necessary equipment and office furniture.
- Executive trainings on Public Health Emergency Management and PHEOC have been conducted in most provinces (six out of nine).
- Additionally, two provinces have successfully established PHEOCs with signed terms of reference.
- The existence of well-coordinated and integrated emergency structures is evident in the all-hazard National Health Emergency Response Operations Plan and the Strategic Tool for Assessing Risks, backed by high-level support at the ministerial and presidential levels, demonstrating strong political endorsement.

Challenges

- The PHEOC Handbook has been developed and validated, but still requires endorsement from the Director General.
- The incident management system is not fully integrated with the national PHEOC resulting in insufficient functionality without a clear mandate to ensure it is operational.
- There is no clear distinction between the two PHEOCs at the National Department of Health and National Institute for Communicable Diseases.
- There are no dedicated staff for the PHEOCs, as appointments are to be made in accordance with the incident management system structure applicable to the South Africa context.
- A dedicated line function budget for the PHEOCs is not in place.

R1.3. Management of health emergency response – Score 3

Strengths

- The establishment of a well-coordinated and integrated emergency structure, as exemplified by National Health Emergency Response Operations Plan and the Strategic Tool for Assessing Risks , supported at high-level ministerial and presidency tiers, signifies robust political endorsement.
- Incident management teams comprising personnel with expertise tailored to specific technical pillars, are deployed in response to incidents or Public health emergencies.
- Comprehensive intra- and after-action reviews are conducted for each outbreak, serving to guide future responses.

Challenges

- The integration of PHEOC and the incident management system has not been established.
- It is essential to institutionalize the incident management system at the subnational levels.
- The implementation of incident management system components necessitates the allocation of dedicated personnel to fulfil roles within each component.

R1.4. Activation and coordination of health personnel in a public health emergency – Score 2

Strengths

- South Africa has established outbreak response teams at national, provincial and district levels.
- The country possesses the capacity to swiftly mobilize response teams for national and international crises, drawing upon resources from the public sector, private sector and non-governmental organizations when necessary.
- Furthermore, an active National Department of Health knowledge hub offers continuous professional development online training for both public and private healthcare workers during emergencies.
- Additional grants are made available for public health emergency responses in accordance with government requirements.

- South Africa has formulated a COVID-19 healthcare personnel surge plan, which serves as a reference point for managing future outbreaks.
- In addition, the country has developed the HRH 2030 strategy and the One Health strategy, reflecting its commitment to comprehensive healthcare planning.
- Notably, there is an established National Search and Rescue Framework in place, further enhancing the country's emergency readiness and response capabilities.
- Medical schools work closely with the National Department of Health and provincial departments of health to provide training for the health workforce and HRH research.

Challenges

- There are no national and intermediate level plans in place that outline a system for pre-deployment, deployment and post-deployment of surge personnel, including sending and receiving personnel and teams during Public health emergencies. Development of plans for emergency medical teams and rapid response teams is needed.
- A comprehensive national multisector workforce surge strategic plan for public health emergencies has not yet been established and requires development.
- The Emergency Medical Team Initiative remains unimplemented.
- There is no established regular training nor simulation exercises programme for frontline workers.

R1.5. Emergency logistic and supply chain management – Score 4

Strengths

- There is a resilient emergency logistics and supply chain management system in place in South Africa to provide substantial support during Public health emergencies.
- Mechanisms are established for accessing funds during Public health emergencies, including the National Health Emergency Response Operations Plan funding section and emergency procurement provisions within the Public Financial Management Act.
- The overall stock visibility system encompasses the mobile and web-based Stock Visibility System (SVS), prescription management system and the National Surveillance Dashboard, to monitor the availability of drugs and vaccines across all levels.
- The Southern African Development Community Protocol on Health for Pharmaceuticals, specifically section 27, is highly relevant for strengthening emergency logistics and supply chain management for South Africa.
- Section 21 guidelines are in place for the emergency approval of unregistered drugs or vaccines.
- The South African Health Products Regulatory Authority provides guidelines for the donation of medicines, medical devices and in-vitro diagnostics.

Challenges

- Sufficient funding is presently insufficient to address the gap analysis and prioritization of resources identified at the local, provincial and national levels.
- While comprehensive visibility has been achieved for medicine stock levels, the same level of visibility remains a challenge for medical supplies (consumables and devices).
- Getting medical supplies/devices through the country borders (customs) is cumbersome.
- Manufacturing of medical devices in South Africa is limited.
- There is inadequate engagement with private sector.
- The emergency logistics and supply chain management system/mechanism has not been exercised, reviewed, evaluated or updated on a regular basis.

R1.6. Research, development and innovation – Score 4

Strengths

- The National Health Research Strategy Framework delineates research priorities, encompassing the investigation of COVID-19 and emergent diseases.
- The South African Ethics in Health Research Guidelines outlines principles, processes and structures in health research (2024).
- The Network for Genomic Surveillance is actively engaged in South Africa.
- A robust research network is operational within the country, comprising entities such as the Council for Scientific and Industrial Research, the South African Medical Research Council, institutions of higher learning, the Human Science Research Council and the Agricultural Research Council.
- The field epidemiology training programme plays a pivotal role in enhancing epidemiological skills and research capabilities.
- An allocation of 2% of the health budget is earmarked for research and development.
- Annual scientific conferences are convened to showcase pioneering research endeavours.
- There is collaboration between WHO and universities in Western Cape Province.
- The country is hosting the WHO Regional Emergency Preparedness and Response Hub.

Challenges

- There is no research repository for the National Department of Health.
- Despite the 2% budget allocated to research, there is a need for additional resources to support health research initiatives.
- Mapping of the public, private and international entities that can support research has not been conducted.

Recommended priority actions

- Update and/or conduct risk profiling, and develop and test the all-hazards plans at national and provincial levels with the involvement of all relevant sectors.
- Establish and adapt an agile mechanism to fast-track the approval and implementation of all relevant documents for public health emergency management in the country.
- Establish and operationalize with clear mandate the PHEOCs at national and provincial level to streamline the coordination of public health emergencies in the country.
- Develop/update national plans, protocols, standard operating procedures, technical guidelines and toolkits for preparing, mobilizing, sending, receiving and coordinating health personnel deployment and teams (surge teams) including emergency medical teams' operationalization, and for information sharing as appropriate during emergencies.
- Establish and maintain pre-arrangements and memoranda of understanding to facilitate public-private partnerships for multisectoral/multidisciplinary research, development and innovation during health emergencies, including the establishment of repository for findings dissemination and utilization.

R2. Linking public health and security authorities

Introduction

Public health emergencies pose special challenges for law enforcement, whether the threat is manmade or naturally occurring. In a public health emergency, law enforcement will need to quickly coordinate its response with public health and medical officials.

Target

Country conducts a rapid, multisectoral response for any event of suspected or confirmed deliberate origin, including the capacity to link public health and law enforcement, and to provide timely international assistance.

Level of capabilities

The Government of South Africa has built national interest on prevention, detection, response and management of all hazards in response to Public health emergencies. South Africa is a signatory to the IHR and as such the Government has built or is in the process of building the necessary capacities and capabilities to prevent, detect, respond to and manage hazards in response to Public health emergencies.

In linking public health and security authorities, the country has established an emergency coordination structure called NATJOINTS responsible for management and coordination of all events of national importance, including emergency response. In addition, there is a memorandum of agreement between the National Department of Health and South African Police Service entailing collaboration needed when responding to matters of mutual interest. In addition, the two departments leverage the Intergovernmental Relation Framework Act/Department of Cooperative Governance and Traditional Affairs to involve all relevant sectors.

It was observed that, despite the existence of a formal memorandum of agreement, there is no evidence of joint training and exercises between health and security authorities, which may need to be strengthened moving forward.

Indicators and scores

R2.1. Public health and security authorities (e.g., law enforcement, border control, customs) are involved during a suspect or confirmed biological event – Score 3

The National Department of Health and security authorities (NATJOINTS, Disaster Management, South African National Defence Force, and Border Management Authority) have established a robust collaborative framework that spans national, provincial and district levels. This framework includes coordinating structures designed to manage events of national interest, encompassing responses to national emergencies, with a specific focus on health. It is noteworthy that the National Department of Health holds permanent membership status within NATJOINTS.

Strengths

- The country has developed the capacity to manage public health emergencies by emphasizing prevention, detection, response and the handling of hazards.
- There is demonstrated collaboration in which response plans are executed jointly during public health emergencies or events of national significance through the coordination at NATJOINTS.
- The National Department of Health and security authorities (NATJOINTS, Disaster Management, South African National Defence Force, and Border Management Authority) have established a robust collaborative framework that spans national, provincial and district levels.

Challenges

- There is difficulty convening all stakeholders for training and simulations for public health emergency response due to competing priorities across the agencies.
- The memorandum of agreement does not include simulation exercises and is currently limited to collaboration between public health and security sector stakeholders only.

Recommended priority actions

- Review/update the current memorandum of agreement between the National Department of Health and South African Police Service to include other relevant sectors, taking into consideration an all-hazard approach.
- Organize advocacy events to sensitize staff from relevant sectors on roles and responsibilities during a suspected or confirmed biological threat or other incidents of concern, such as chemical and radiological events.
- Develop relevant standard operating procedures and guidelines defining the process and communication mechanisms for assessing and responding to suspected deliberate international events.
- Develop training curricula using country specific content, such as regulations/authorities, agency roles/responsibilities and case studies.
- Conduct and document joint training for public health, animal health and security authorities to orient, exercise and institutionalize the knowledge of memoranda of agreement and other agreements related to all hazards.

R3. Health services provision

Introduction

Resilient national health systems are essential for countries to prevent, detect, respond to and recover from Public health emergencies, while ensuring the maintenance of health systems functions, including the continued delivery of essential health services (EHS) at all levels. Particularly in emergencies, health services provision for both event-related case management and routine health services are equally as important. Moreover, ensuring minimal disruption in health service utilization before, during and beyond an emergency and across the varied contexts within a country is also a critical aspect of a resilient health system.

Target

(1) Evidence of demonstrated application of case management procedures for events caused by IHR-relevant hazards. (2) Optimal utilization of health services, including during emergencies. (3) Ensuring continuity of EHS in emergencies.

Level of capabilities

Health service provision in South Africa is guided by a well-developed policy framework and national clinical case management guidelines that align with the IHR (2005) to address the country's evolving burden of disease. Health services are provided by both public and private health facilities, with the private sector providing services to about 27% of the population. Health services are free to the user in the public sector but are accessed at a fee in the private sector, paid either through health insurance or out-of-pocket. The services are accessible to most of the population, with an outpatient utilization rate of 2.0 during the 2023–2024 financial year (public sector).

A comprehensive package of health services is delivered in health facilities regularly, aligned with the capacities at the different subnational levels. Referral protocols have been developed to guide lower-level health facilities to ensure patients access all services needed. Case management guidelines for several IHR priority hazards including viral haemorrhagic fevers, radio-nuclear and chemical events have been developed and can be accessed at all levels of the health sector. An electronic system (DHIS) is used to collect data for monitoring service utilization. There is collaboration across public and private sectors in health service delivery, although data sharing from the private sector needs to be pursued through strengthened private-public partnership. The multisectoral national outbreak response teams are available at national and provincial levels to provide guidance for outbreak management in the health system, as necessary.

However, the health system has challenges including staff shortages at all levels, inadequate infrastructure, for example, lack of isolation wards in several health facilities, insufficient funding for responding to outbreaks and disasters, and limitations in data quality. While strides have been made in pandemic preparedness, gaps in human resources and dedicated emergency funding within the health sector continue to hamper the system's full potential. In addition, it was noted that there are separate condition/disease-specific case management guidelines which can be found online; there is a need to consolidate these documents into one document or an electronic folder that can be accessed easily by the users. Private-public partnerships need to be strengthened, including through improved data sharing across the two sectors. Monitoring of health services utilization should consider data from both the public and private sectors and outpatient utilization rates should be reported as one of the indicators for monitoring health services access and utilization.

Indicators and scores

R3.1. Case management – Score 4

Consensus was reached on a score of 4, consistent with the country's self-assessment score, because several guidelines were available for the different IHR priority diseases, and these are being implemented at national and intermediate levels. Although the guidelines are not consolidated, they are available when and where needed. The country was advised to consolidate these further into one all-encompassing folder/document that is easily accessible, including the guidelines for radio-nuclear and chemical events.

Strengths

- National clinical case management guidelines are available and are periodically updated to align with the constantly changing burden of disease and to meet international standards as well. The guidelines cover most of the nationally-defined priority conditions aligned with the IHR (2005), including chemical and radiation hazards.
- There are case management standard treatment guidelines for hospital and primary healthcare facilities that were updated in 2020 and disseminated to all levels of care.
- Referral protocols are developed and updated for different conditions common and relevant to the country.

Challenges

- Stand-alone case management guidelines exist for different conditions and may not be easily accessible.
- Staff shortages exist in all facilities across all levels of services, especially in the public sector.
- No regular simulation exercises/drills of different protocols are routinely conducted, which highlights the need to ensure knowledge of referral protocols and to assess coordination and response times.
- Infrastructure limitations exist, notably with regard to isolation wards and equipment.

R3.2. Utilization of health services – Score 3

Consensus was found on a score of 3, while the country's self-assessment score was 2, given an outpatient utilization rate of 2.0 visits per person per year in the public sector. If access in the private sector is considered, the overall access to health services in the country is higher. Data available indicates that there was a significant decline in health services utilization during the COVID-19 pandemic; however, it has increased post-pandemic, though is not yet at pre-pandemic levels.

Strengths

- A comprehensive health system is available to provide care at all levels and is sometimes used by people from other countries. Additionally, health services are provided free of charge for all in the public sector.
- An electronic system exists through the DHIS to monitor the health services utilization rate. The DHIS is now web-based, allowing data access at all levels and at any point in time. The system also has early warning features.
- Regular updates and analysis of data are undertaken through the DHIS and other systems to identify trends and areas for improvement, and to ensure accurate tracking of service utilization.

Challenges

- Limitations in human resources capacity affects data quality and thus the reliability of the data.
- A patient electronic record system is not fully implemented. Manual patient records systems are still in use in some facilities, increasing the margin of error and requiring more human resources, thereby exposing the department to negative audit findings.

- There is no allocated ring-fenced budget for response to emergencies that are not yet disasters. Furthermore, there are delays in budget allocation for disaster management.
- Outpatient utilization rate is not an indicator routinely used by the National Department of Health to monitor access to and utilization of health services. It was specifically computed for the JEE exercise.

R3.3. Continuity of essential health services (EHS) – Score 4

Consensus was found on a score of 4, which was strongly proposed by the country team during the country's self-assessment and during the JEE discussions; this requires that the EHS package has been defined, guidelines for maintaining continuity of EHS have been developed and are implemented at national and intermediate levels, and a system for monitoring continuity of the services is in place. However, the guideline titled "Continuity of Essential Health Services during COVID-19: Operational Guidance Concepts", which proposes an EHS package and options for delivering these services during and beyond the COVID-19 pandemic, is labelled "V.01 Draft for Discussion 19 Oct 2021". This draft will need to be finalized, endorsed and distributed to provinces and districts. The DHIS system can be used to monitor access of the population to the EHS. Data available shows that there was disruption in health service delivery during the COVID-19 pandemic. An interim guidance document was provided for continuation of essential services during the COVID-19 pandemic based on WHO guidance, and this was implemented in the provinces.

Strengths

- South Africa has established national, provincial and district outbreak response teams. In addition, there is an established inter-ministerial team. These ensure coordinated and effective responses during public health emergencies and collaboration among public and private sectors during responses. The inter-ministerial team facilitates collaboration and resource sharing across various government sectors, enhancing the overall emergency response capability.
- The established specialized emergency workforce ensures adequate healthcare resources during pandemics or epidemics (such as the COVID-19 pandemic); however, these resources are not adequate for all emergencies.
- Secured funding is available to upgrade and expand health facilities to accommodate both routine and emergency needs within a short space of time.

Challenges

- There are no dedicated HRH that are employed for coordinating and responding to Public health emergencies. During a pandemic or epidemic, the healthcare worker-to-patient ratio is inadequate. There is no trained surge team for supporting response to emergencies.
- There is no dedicated funding for disasters in the health sector. The National Department of Health relies on the Department of Cooperative Governance and Traditional Affairs.
- Infrastructure limitations, such as physical, information and communication technology and equipment, compromise adequate provision of comprehensive health services.

Recommended priority actions

- Develop/finalize the National Continuity of Essential Health Services Guidelines.
- Consolidate and update case management guidelines, including all IHR hazards, into one document both electronic and hard copy; establish and maintain a tracker of the dates when guidelines are updated. Additionally, finalize the Policy and Guidelines on Traditional Medicine.
- Strengthen public-private partnerships in health service provision; develop guidelines on public and private partnerships in health service delivery before and during emergencies; improve data reporting; and enhance monitoring of services utilization, including regular analysis of outpatient utilization rates.
- Consider adopting and investing in the World Health Organization Strengthening and Utilizing Response Groups for Emergencies (SURGE) training to address the shortage of staff for emergency response.
- Conduct routine on-site mentoring and provide supportive supervision to monitor the implementation of guidelines at the lowest levels.
- Invest in addressing human resource shortages and improvement of infrastructure (e.g. isolation wards).

R4. Infection prevention and control

Introduction

To have strong, effective infection prevention and control (IPC) programmes that enable safe health care and essential services delivery and prevention and control of healthcare-acquired infections (HCAIs), it is critical to initially ensure that at least the minimum requirements for IPC are in place, both at the national and facility level, and to gradually progress to the full achievement of all requirements within WHO IPC core components recommendations.

Target

(1) National IPC programme strategy has been developed and disseminated. (2) Implementation of the national IPC programme plans, with monitoring and reporting of HCAIs. (3) Established national standards and resources for safe health facilities.

Level of capabilities

The IPC programme in South Africa is under the Quality Directorate and guided by the National IPC Strategic Framework and Practical Manual for Implementation, developed in 2021. The IPC national strategy is aligned with WHO IPC core components. A key strength of South Africa's IPC programme is the presence of designated leadership at both the national and provincial levels. The national IPC focal person and provincial focal persons have well-defined terms of reference, enabling structured oversight and coordination of IPC activities across the country.

The national programme has developed and disseminated IPC guidelines and standard operating procedures for priority diseases to all levels of care. These guidelines ensure uniformity in IPC practices and empower healthcare facilities to effectively manage infection risks. To complement these efforts, the programme supports IPC in-service training to continually build capacity within healthcare settings. Additionally, South Africa has forged a collaborative relationship with the Infection Prevention and Control Africa Network (ICAN), further expanding access to resources and expertise.

In response to the challenge of HCAIs, South Africa has developed a national HCAI strategy. While this strategy focuses on specific HCAIs, the absence of a structured, nationwide reporting mechanism remains a limitation. Currently, South Africa lacks a comprehensive national HCAI surveillance system, which hinders the ability to monitor and respond to infection trends in a systematic manner. The monitoring of IPC implementation is conducted using the Infection Prevention and Control Assessment Framework, an annual tool for evaluating compliance with IPC strategies.

Indicators and scores

R4.1. IPC programmes – Score 2

The initial score from the country's self-assessment was 3. However, upon review and discussions among the external expert and country teams on the definition of an active programme and considering WHO's minimum requirements, several key gaps were identified, including the lack of a dedicated budget, absence of an IPC structure and the absence of budgeted work plans at both national and subnational levels. Another issue raised was that IPC is currently housed under the Directorate for Quality Assurance, but the mandate of this directorate has since changed. As a result, IPC has become somewhat 'orphaned'

within this structure, and its placement no longer makes sense. The IPC team needs to propose a more appropriate placement – potentially under the Department of Communicable Diseases or another department – where it can receive proper funding and support. Consequently, it was agreed to adjust the score to 2.

Strengths

- The National IPC Strategic Framework and Practical Manual for Implementation (March 2020) is in place after its launch in 2021.
- There is an established National IPC Committee with appointment letters, terms of reference and quarterly meetings.
- Five-day IPC Basic Training, a certificated course, was conducted in most provinces by ICAN and coordinated by the National Department of Health.
- The Infection Prevention and Control Assessment Framework Tool is available for monitoring the implementation of the IPC Strategy and performed annually.
- Training institutions such as ICAN are available to support IPC in-service and post-service training.

Challenges

- There are budgetary constraints for funding the implementation of IPC strategic and operational plans, relying on the quality assurance level.
- The IPC focal person official is a non-funded post.
- No IPC structure exists at national level and there is a lack of clear reporting lines.
- There is no continuity of appointment of the IPC focal person in the past few years.
- Weaknesses in IPC at primary healthcare facilities are evident, as there are no dedicated IPC positions, and clinical nurse practitioners who are responsible for other duties, are relied upon instead.
- There is no standardized or uniform IPC structure across provinces. In some provinces, there is no IPC coordination at the district levels.
- The country lacks a standardized, coordinated training programme for IPC.
- There is no funding for IPC work plans.

R4.2. HCAI surveillance – Score 2

The country has developed surveillance for HCAIs. All provinces that have conducted HCAI surveillance are reporting, but the process is neither coordinated nor structured.

Strengths

- A strategic plan for HCAIs available, with priority HCAIs identified.
- The IPC technical working group of the Ministerial Advisory Committee on AMR collaborated with the University of Antwerp, Belgium, enabling South African state hospitals to participate in the Global Point Prevalence Survey to assess the rate of HCAIs, antimicrobial prescribing and usage.
- There is good laboratory capacity and trained IPC personnel.
- A National Patient Safety Incident (PSI) reporting system exists, and some HCAIs are reported through this system.

Challenges

- HCAI surveillance lacks a standardized electronic-based system.
- Discrepancies are evident between alert reports and laboratory tracking.
- HCAIs are under-reported in the PSI system.

R4.3. Safe environment in health facilities – Score 2

The country's self-assessment score was 2, which was retained during the external evaluation. A document on standards and norms for safe health facilities is available but does not comprehensively address IPC and water, sanitation and hygiene (WASH) infrastructure.

Strengths

- There is good support and collaboration from the Environmental Health Directorate.
- A norms and standards guidance document has been developed.
- The Water and Sanitation for Health Facility Improvement Tool (WASH FIT) and training have been provided, but require rollout in all provinces.
- National infrastructure support is in place to assist facilities that are underperforming according to the Ideal Health Facility Framework.

Challenges

- Budget constraints exist, and there is no budget for Category C (Treasury-approved) projects.
- The country faces staffing shortages.
- Security challenges exist, such as vandalism and theft of state property.
- The country lacks consequence management.
- There is poor maintenance of infrastructure.
- Basic services provision by municipalities is poor in most areas due to financial and managerial challenges.
- Contracted services are marked by poor provision of services and inconsistency, including issues with machinery, training, staffing and security.
- There are increasing disasters, such as floods.

Recommended priority actions

- Establish IPC structure in the appropriate directorate at national, provincial and facility levels and standardize the structures across all provinces with clear reporting lines.
- Develop an in-service training curriculum and incorporate outbreak components to standardize IPC training at all levels.
- Collaborate with the AMR team to update the HCAI Strategic Plan.
- Update the standards and norms for safe health environments to be comprehensive and more elaborate.

R5. Risk communication and community engagement

Introduction

Risk communication and community engagement (RCCE) should be a multilevel and multifaceted process which aims at helping stakeholders define risks, identify hazards, assess vulnerabilities and promote community resilience, thereby promoting the capacity to cope with an unfolding public health emergency. An essential part of risk communication is the dissemination of information to the public about health risks and events, such as disease outbreaks. For any communication about risk caused by a specific event to be effective, the social, religious, cultural, political and economic aspects associated with the event should be taken into account, including the voice of the affected population.

Target

States Parties use multilevel, multisectoral and multifaceted RCCE capacity for Public health emergencies. Real-time exchange of information, advice and opinions during unusual and unexpected events and emergencies so that informed decisions to mitigate the effects of threats, and protective and preventive action can be made. This includes a mix of communication and engagement strategies, such as media and social media communications, mass awareness campaigns, health promotion, social mobilization, stakeholder engagement community engagement and infodemic management.

Level of capabilities

In South Africa, RCCE is led by the National Department of Health with support from partners (such as UN agencies, United States of America agencies, South Africa Red Cross, non-governmental organizations, academia, facility-based organizations, community-based organizations, etc.) to enhance joint response efforts. The country has strong RCCE partner coordination mechanisms in place to respond to Public health emergencies, but partners are not always aligned with the harmonized and approved messages. The Government's Communication and Information System leads and coordinates all government communication responses.

South Africa has established RCCE operational teams and working groups to coordinate partners and activities in different work streams such as the RCCE Technical Working Group, RCCE Internal, RCCE Provinces, RCCE Social Listening and Infodemic Management, RCCE Research, Monitoring and Evaluation, and Training. At the time of writing, all the RCCE systems and resources were operational across all levels and relevant sectors, including community-led readiness and response interventions. RCCE systems and resources are fully integrated into the emergency response system. The national level collaborates with and supports the intermediate and community levels to use national and local socio-behavioural and epidemiological data for tailored local risk communication for communities. Evidence and data gathered are systematically used for measurement, evaluation, learning and continuous improvement of RCCE interventions. The RCCE technical area has also elevated its value and contribution in all emergency responses through establishing a closer, interactive, and more responsive relationship to address the communication needs of other emergency response pillars such as coordination, case management, epidemiology and surveillance. In doing so, this has improved transparency around the government's planned response and its ongoing dynamics with communities. This is aligned with strategies for infodemic

management that ensure transparency and avoidance of information vacuums that are known to create fertile ground for misinformation and disinformation.

The role of RCCE has been significantly prioritized within the National Department of Health, as evidenced by its integration into national strategic and operational plans of governments. This prioritization includes the establishment of key performance indicators, and the dedicated personnel to coordinate preparedness and response efforts.

RCCE implementation plans are reviewed internally with each emergency to sustain and integrate lessons learned, and improve preparedness and response. However, this process happens on an ad hoc basis, and therefore needs to be formalized and normalized, taking into consideration the multi-stakeholder after-action review report for RCCE-related campaigns.

RCCE has sustained most of the systems established for response to public health emergencies such as COVID-19, and continuously uses lessons learned to improve its functions and relevance to benefit other health campaigns. The RCCE internal workstream within the National Department of Health is responsible for planning and coordination. The roles and responsibilities are distributed among stakeholders from private and public sectors, development partners, non-governmental organizations (NGOs) and inter-governmental stakeholders, all of which are engaged at all levels.

In terms of best practices, the National Department of Health has broadened the reach of community engagement and feedback activities by leveraging partners' strengths and outreach capacities through knowledge and resource mobilization, and sharing. It has sustained the RCCE forum for continuous coordination of various RCCE-related activities by provinces and stakeholders.

Best practices related to community engagement include utilization of existing community-based systems and structures such as traditional and religious leaders, counsellors, traditional health practitioners and taxi associations. In addition, activations are aided by use of mobilization trucks with pre-recorded audio-visual content, messages and infographics, together with provision of relevant healthcare services to intensify community engagement and demand creation.

This technical area is a responsive and trusted source of information across the country, with a single spokesperson to ensure a single message; and a comprehensive report covering all affected provinces produced during an emergency. Community trust and confidence are built through tailored messages that consider the social, cultural and economic contexts of the affected populations, which includes using local languages, local media and local influencers. Streamlined efforts and standardized messages through collaborative partnerships also facilitate better coordination among various stakeholders, ensuring that RCCE messages are standardized, consistent and aligned with RCCE objectives. Health awareness days are also used to educate the public about the importance of prevention of communicable diseases, and vaccination.

Indicators and scores

R5.1. RCCE systems for emergencies – Score 4

The country's self-assessment score was 4, and after discussions during the external evaluation, the score was retained. National RCCE systems are fully operational and there is harmonized coordination among all key technical areas. RCCE has an adequate number of skilled and/or trained personnel and volunteers, and adequate financial resources. RCCE is provided for within the national communication and health promotion budgets, as well as within the programmes. However, additional budget is required during Public health emergencies. The national multisectoral plans are reviewed at least annually. RCCE has arrangements in place for scale-up, as evidenced by a simulation exercise or during response to a public health emergency. Evidence and data gathered from review of RCCE activities are used for measurement, evaluation, learning and continuous improvement of RCCE interventions.

Strengths

- RCCE systems and mechanisms have been established and sustained beyond COVID-19, with lessons learned incorporated to enhance public health emergency response.
- RCCE as an integration tool has now evolved to include, among others, the promotion of EHS to enhance, for example, Expanded Programme on Immunization work.
- Periodic review of plans as well as intra- and after-action reviews generates new lessons and knowledge to improve campaign strategies, health messages and community feedback.
- Intergovernmental collaboration has increased outreach capacity by working with other departments to provide additional workforce, such as community workers.
- Social listening and infodemic management tools have been sustained to track and analyse key trends utilizing both online and offline sources to inform communication priorities to debunk misinformation.
- Partner coordination established during COVID-19 has been sustained to strengthen capacity building and resource mobilization to prepare for and respond to future outbreaks.
- There are sustained digital communication platforms that were established during COVID-19, such as call centres, email, WhatsApp services and website pages for outbreaks, all of which are now used to amplify health messages.
- Local universities are collaborating with the RCCE initiatives to address vaccine hesitancy through surveys to gather crucial data on community attitudes and behaviours regarding vaccination, thereby informing targeted strategies, campaigns and training.

Challenges

- Very limited budget exists for RCCE activities during emergencies.

R5.2. Risk communication – Score 4

The country's self-assessment score was 4, which was retained during the external evaluation. There is planned communication with ongoing proactive outreach through a variety of channels (e.g., hotline, complaint systems and social listening); online and offline media are monitored daily for feedback, and insights and data are used to adjust and improve risk communication strategies. There is strong infodemic management using search mechanisms for online or/and offline sources to shape messages and strategies. There is coordination of risk communication strategies and messages across sectors and levels of government, which leads to effective RCCE.

Strengths

- All-hazards and multisectoral emergency risk communication mechanisms are consistently implemented and regularly reviewed, evaluated and updated.
- RCCE has been used to strengthen the surge capacity of communicators and health education and promotion practitioners, as well as to activate and sustain systems to enhance risk communication at national, provincial, district and sub-district levels.
- RCCE has also been used to strengthen and sustain engagement with partners to share information in a timely manner to avoid inconsistencies, duplications and potentially conflicting guidance and messaging.
- RCCE has ensured that messages are consistent across sectors and levels, and information is shared regularly while also ensuring that the public knows where to obtain up-to-date information.
- Misinformation is addressed through social listening and infodemic management mechanisms using a dedicated team to gather insights and produce actionable reports.
- Production, translation, printing and distribution of information materials are undertaken in collaboration with partners, ensuring information access to improve public understanding of health risk through trusted sources.

- RCCE bi-weekly meetings ensure standardized messages are distributed during Public health emergencies, and involve a systematic review of proposed messages to prevent mixed messaging, curb the spread of misinformation and to maintain a unified voice across various stakeholders.
- RCCE members are trained and skilled in social listening and infodemic management, which was furthered through in-person infodemic management workshops done by WHO in 2021 and 2023, and attendance at regular expert presentations on new methods and templates to manage information overflow and misinformation.

Challenges

- Limited capacity and resources exist for RCCE response.
- There is no dedicated person to carry out capturing, analysis and storage of information on progress and misinformation.
- Coordination of RCCE activities at district and sub-district levels remain a challenge that is currently being addressed to strengthen capacity for district and community-led RCCE.

R5.3. Community engagement – Score 3

The country's self-assessment score was 4; however, after discussions during the external evaluation the score was reduced to 3. Communities are actively involved in emergency response but are engaged only on an ad hoc basis. Surge capacity mechanisms for community engagement are in place and operational but need to be further strengthened at district and community levels. Formal or informal community feedback mechanisms such as call centres and call-in radio programmes are used to inform emergency responses, in addition to community events (such as imbizos, focus groups, door-to-door and blitz communications where there are public gatherings). Collection and analysis of community feedback and data to influence behaviour change at all levels are conducted on an ad hoc basis.

Strengths

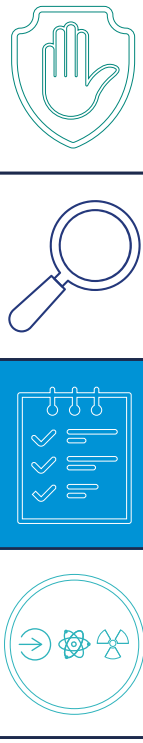
- There is good political buy-in, for example, the President of South Africa visited the community of Hammanskraal during a recent cholera outbreak.
- Relevant technical information is swiftly made available to community engagement teams through the Outbreak Response Teams at all levels.
- Development partners' existing feedback systems are used to supplement community feedback, such as the support provided by Médecins Sans Frontières during the cholera enhanced response.
- Health promotion teams play a crucial role in collecting feedback which is utilized to tailor RCCE interventions to effectively address the specific concerns and challenges faced by those communities.
- The Digital Health Promotion Platform is used to disseminate digital health promotion messages and was established to expand coverage.
- The health promotion unit collaborates with other programmes and partners to assist with community engagements and the resources needed.
- Annual health awareness days are used to amplify health promotion messages to address the burden of diseases.
- Training for community engagement teams conducted during public health emergencies is delivered through a combination of face-to-face sessions and webinars, to ensure they are well-equipped to engage effectively, and to foster trust between health authorities and the public.

Challenges

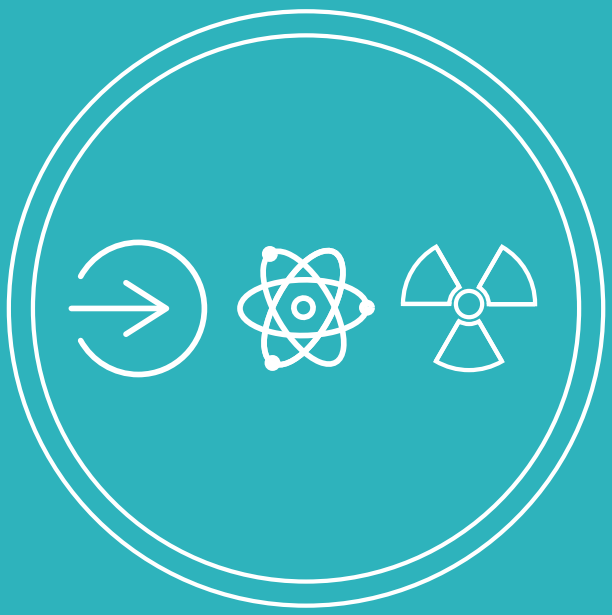
- Current community engagement reporting systems and tools for collecting community feedback are inadequate.
- There is limited capacity to measure the output of community engagement activities to improve response.

Recommended priority actions

- Develop a multisectoral multi-hazards national RCCE strategy that includes all the available disease-specific plans and beyond.
- Establish a strong monitoring and evaluation mechanism with key performance indicators for different areas of focus (e.g. function, repository of documentation, analysis, documentation across the IHR core capacities at all levels, dissemination of RCCE materials, advocacy for resource mobilization, etc.).
- Strengthen community engagement using innovative approaches to co-design interventions with communities across the IHR core capacities.
- Set an effective infodemic mechanism to manage online and offline data (function/national personnel, social listening, feedback, rumour tracking, etc.) to domesticate infodemic management and strengthen national leadership.
- Review and update the Health Promotion Policy and Strategy and RCCE Framework for Health Emergencies with guidelines, action plans, toolkits, and roles and responsibilities for national, provincial, district and sub-district levels by end of financial year (March 2025).
- Conduct mapping of stakeholders and engage them systematically at community levels.



IHR-related hazards and points of entry and border health



POE. Points of entry and border health

Introduction

All core capacities and potential hazards apply to points of entry (POE) and thus enable the effective application of health measures to prevent international spread of diseases. State Parties are required to maintain core capacities at designated international airports and ports (and where justified, for public health reasons, a State Party may designate ground crossings), which will implement specific public health measures required to manage a variety of public health risks.

Target

States Parties designate and maintain core capacities at international airports and ports (and where justified for public health reasons, a State Party may designate ground crossings) that implement specific public health measures required to manage a variety of public health risks.

Level of capabilities

The country has 71 POE comprising of 11 international airports, eight seaports and 52 ground crossings. Among the 71 POE, port health services are fully rendered at 36 POE by environmental health practitioners, supported by other health professionals. A total of 10 airports have been designated in terms of the IHR, 1974 (Act No. 28 of 1974). Through strategic risk assessment, 36 POE were identified for designation in line with the IHR (2005), including an additional six seaports and 19 ground crossings. Annual assessments of all POE identified for designation are conducted to strengthen and maintain their core capacities. Eight ports have the capacity to issue ship sanitation certificates and this list has been communicated to WHO as required by Article 20(3) of the IHR. The operational services in POE are rendered by the Border Management Authority which was established on 1 April 2023 with the National Department of Health maintaining the responsibility for policy development and monitoring service provision.

The Border Management Authority supports the National Defence Force Military Health Service in the provision of port health services at the military airport. To ensure POE have the capacities for prevention, early detection and response, core capacity assessments are conducted by the National Department of Health on an annual basis. The Border Management Authority has integrated the border law enforcement functions of four departments which include health, home affairs, agriculture and environmental affairs. Prior to the establishment of the Border Management Authority, these functions were provided by different departments, resulting in coordination challenges. The main goal of this integrated approach is to improve the harmonization of services and collaboration of activities across departments. This initiative was undertaken after an unsuccessful coordination approach which was implemented prior to the establishment of the Border Management Authority. The integration of these functions in the Border Management Authority has resulted in the harmonization of processes and supports better coordination during inspection and screening of goods, conveyances and travellers during routine times and Public health emergencies.

POE implement the functions provided for in Article 22 of the IHR and various policies, legislation, norms and standards, guidelines, and standard operating procedures in place to support the implementation of the competent authority responsibilities. The National Department of Health monitors the services provided at POE to ensure they comply with the IHR and domestic requirements. Health functions at

POE and national levels are implemented by adequately trained environmental health practitioners who are registered with a statutory professional body called the Health Professions Council of South Africa (HPCSA). POE participate in various multi-stakeholder committees as part of ensuring strengthened coordination and collaboration for routine times and during Public health emergencies. These include committees for aviation, maritime and cross border sectors, NATJOINTS structures and outbreak response teams at national, provincial and district levels, and other relevant structures. Additionally, the National Department of Health regularly reports to International Civil Aviation Organization through the Department of Transport on the country's implementation of Annex 9 health requirements.

Indicators and scores

POE1. Core capacity requirements at all times for POE (airports, ports and ground crossings) – Score 3

The country team proposed a score of 3 during their self-assessment, which the external team agreed with, provided that some of the designated airports are implementing all the routine core capacities and these are integrated into the national surveillance system for biological hazards. During the site visit at O.R. Tambo International Airport, it was observed that the airport is implementing routine capacities including having guidelines, plans and standard operating procedures, clearance of aircrafts and travellers from malaria and yellow fever zones, and presence of clinic and holding facilities for management of ill/ suspected travellers.

Strengths

- Annual assessments are conducted to assess and monitor routine core capacities in designated and non-designated POE and ensure compliance with the IHR (2005) core capacity requirements, and findings shared with Border Management Authority for improvement.
- The annual core capacity assessments are included as one of the performance indicators in strategic documents (such as the strategic plan and annual performance plans) of both the National Department of Health and the Border Management Authority.
- There is integration of port health services with other law enforcement sectors (agriculture, environment, home affairs, health) under the Border Management Authority. This integration aims to facilitate coordination of all routine activities and during emergencies.
- The National Department of Health provides regular training on the IHR and core capacity requirements to health specialists and non-health border officials.
- Trained, skilled and competent environmental health practitioners are available who are registered with the HPCSA.
- There is integration of POE in the national health surveillance system for biological hazards; each POE has notification procedures for notifying communicable disease coordinators and the IHR National Focal Point, of events occurring at POE.
- Designated and some non-designated POE have arrangements with emergency medical services and health facilities for the transportation and medical assessment of ill travellers from POE.
- Working relationships exist with the transport sector (aviation, maritime and cross-border) that promote collaboration and cooperation.

Challenges

- There are staffing shortages at most POE; at O.R. Tambo it was found during the site visit that out of 200 staff required only 78 are available.
- There is no dedicated space in most POE, particularly land borders, for the interviewing and/or temporary isolation of suspected/ill travellers.
- Inadequate or lack of information and communication technology resources, such as cellular network and computers, hampers the implementation of communication protocols.

- Sea ports and ground crossings are not designated as per the IHR.
- At the O.R. Tambo International Airport site visit there was no evidence of calibration of thermal scanners, the holding facility was inadequate and not separated by sex, there was no algorithm for handling of ill/suspected travellers, no interview room, inadequate implementation of vector control, air and water quality plans, and absence of screening counters for officers doing document checks (e.g., yellow fever certificates).

POE2. Public health response at POE – Score 3

The country proposed score of 3 during their self-assessment and the external team of experts agreed with this score, indicating the country has developed public health emergency contingency plans covering biological hazards. During the site visits, it was further observed that the O.R. Tambo International Airport has integrated a Public Health Emergency Contingency Plan within their Aerodrome Emergency Plan.

Strengths

- POE port committees exist which serve as emergency committees.
- Multisectoral public health emergency contingency plans exist at all designated POE and some non-designated POE, covering biological hazards.
- Designated and non-designated POE have administrative arrangements with relevant stakeholders including health facilities and emergency medical services, to respond to Public health emergencies.
- Port Health has representation in response structures (e.g., Multisectoral National Outbreak Response Team, Provincial Outbreak and District Outbreak Response Teams).
- Response capacities have been tested and strengthened through recent public health emergencies (e.g. COVID-19, cholera, mpox outbreaks) where capabilities were demonstrated for mobilizing additional human resources from military health services, provinces, and in some instances, municipalities.

Challenges

- Multisectoral public health emergency contingency plans are not addressing multi-hazards.
- There is a lack of isolation and interview rooms for suspected/ill travellers and animals at some POE.
- There is inadequate testing of developed contingency plans.

POE3. Risk-based approach to international travel-related measures – Score 4

The country's self-assessment score for this indicator was 4, which was retained based on consensus during the external evaluation.

Strengths

- Multisectoral national outbreak response teams exist with various stakeholders where risk assessments are conducted to inform the implementation of international travel-related public health measures.
- Publications on travel-related measures are available (e.g., yellow fever, COVID-19).
- Port Management Committees (PMCs) exist at POE for coordination and integration of implementation of international health related measures.
- Structures exist for cross-border collaboration, information sharing and harmonization of measures (POE and national levels).
- There are bilateral arrangements with neighbouring countries at a port level for communication and information sharing.

Challenges

- Human resources capacity is limited at some POE.
- Population connectivity mapping has not been conducted to identify areas of increased risk for spread of communicable disease.
- There is limited infrastructure, particularly at land borders (isolation facilities), for isolation of suspected travellers.
- Evaluation has not been conducted of the already-implemented travel-related measures to inform updating of guidelines and travel advisories.

Recommended priority actions

- Conduct a comprehensive core capacity and strategic risk assessment using the World Health Organization tools and update the designation of POE to also include ports and ground crossings based on the IHR (2005) requirements.
- Develop and implement, in collaboration with other relevant stakeholders, a multisectoral POE strategic plan to enable the attainment of required IHR core capacities for all designated and relevant non-designated POE.
- Provide/construct screening infrastructure, interview rooms and isolation facilities at all POE.
- Develop a human resource plan to address staffing challenges and formalize arrangements for surge capacity during Public health emergencies.
- Conduct population mobility and connectivity mapping at ground crossings and engage stakeholders (local surveillance teams and security authorities) to enhance surveillance and control at high-risk locations including porous borders.

CE. Chemical events

Introduction

Timely detection and effective response to potential chemical risks and/or events requires collaboration with other sectors responsible for chemical safety, industries, transportation and safe disposal. This would entail that State Parties need to have surveillance and response capacity to manage chemical risks or events and effective communication and collaboration among the sectors responsible for chemical safety.

Target

States Parties with surveillance and capacity for chemical risks or events. This requires effective communication and collaboration among the sectors responsible for chemical safety, including health, occupational health, emergencies, environment, transportation and safe disposal, agriculture/veterinary, as well as industries.

Level of capabilities

South Africa has a robust regulatory framework in place for the management and use of chemicals. The National Environmental Management Act serves as the foundation for environmental protection and includes provisions for managing chemical-related disasters. The Occupational Health and Safety Act governs the handling of hazardous substances in the workplace, ensuring regulations related to chemical exposure and safety are adhered to. Additionally, the Hazardous Substances Act regulates the import, production and use of hazardous substances in the country, with an emphasis on mitigating chemical risks.

The National Disaster Management Centre is responsible for coordinating the national response to chemical events, while the South African National Defence Force manages chemical incidents through the implementation of the Manual on the Joint Management of Incidents Involving Chemical, Biological Agents, or Radioactive Materials. The National Department of Health plays a crucial role in managing the health impacts of chemical events, focusing on public safety and medical treatment for chemical exposure. In response to chemical events, the Multisectoral National Outbreak Response Team is mobilized, and specialized laboratories are engaged to detect and identify chemical agents.

While South Africa's capacity is strong, certain areas still need improvement. These include strengthening the National Health Emergency Response Operations Plan for South Africa to comprehensively cover all major hazard sites and facilities, as well as enhancing coordination and collaboration mechanisms among key stakeholders to ensure a unified and effective response.

South Africa is also a signatory to several key international conventions, including the Stockholm Convention on Persistent Organic Pollutants, the Chemical Weapons Convention, the Biological and Toxin Weapons Convention, Minamata Convention on Mercury, Basel Convention on the Transboundary Movement of Hazardous Waste and their Disposal, and the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade. These agreements provide international guidelines for chemical safety and event response, further strengthening the country's ability to handle chemical events effectively.

Indicators and scores

CE1. Mechanisms established and functioning for detecting and responding to chemical events or emergencies – Score 3

The score proposed during the country's self-assessment was 4. However, the score was revised to a 3 given that timely and systematic exchange of information between the appropriate chemical surveillance units and relevant sectors is not ensured for response to acute chemical events.

Strengths

- Guidelines are available for assessment and management of chemical events (e.g., Disaster Management Act, Framework, Disaster Management plans, Department of Cooperative Governance and Traditional Affairs Contingency Plans, Environmental Health Practitioners (EHPs) Chemical Poisoning Investigation Guidelines, IDSR Strategy, Afritox case management).
- There are ongoing sector trainings, surveillance, notification of notifiable medical conditions including chemical events, and chemical incident investigation, safety and response.
- Resources are available that can be deployed when the need arises to ensure joint efforts in response activities.
- The Border Management Authority undertakes screening of painted surfaces, toys and imported paint for lead (Pb) with X-ray fluorescence.
- Four poison information centres are established in the country, of which two are operating 24 hours and the rest for 17 hours per day.
- Chemical poisoning guidelines and an investigation form are in use by EHPs
- Chemical incident reporting is undertaken.
- Various platforms are in place (e.g., bulk e-mail distribution, multistakeholder forums, etc.) for sharing reports on chemical incidents.

Challenges

- Surveillance systems are fragmented.
- There is limited routine chemical sampling of consumer goods and other sources of drinking water for chemical hazards.
- Budget and human resource constraints are evident.
- There is limited use of private chemical laboratories to enhance the services of public chemical laboratories, and to improve turnaround time.
- False declarations of cargo by importers result in a lack of monitoring of certain imported consignments and importation of illegal chemical products.

CE2. Enabling environment in place for management of chemical events – Score 2

The score proposed by the host country during their self-assessment was 4. However, the score has been revised to a 2 due to the lack of a chemical event response plan that covers all major hazard sites and facilities, as well as the absence of a functional mechanism for multisectoral coordination and collaboration in managing chemical events.

Strengths

- South Africa has ratified a number of chemicals-related Multilateral Environmental Agreements that are implemented through comprehensive chemicals management legislation and strategies.
- Two strategic documents are in place outlining the national profile for national chemicals management.

- There are two all-hazards, multi-level, and multisectoral response plans (National Department of Health National Health Emergency Response Plan for biological and non-biological agents) and a Department of Cooperative Governance and Traditional Affairs Manual on Joint Incident Management (for biological, chemical and radiological incidents) that are structured to be used to respond to chemical events.
- South Africa is involved with international chemical/toxicological networks (for example, collaboration with the Organization for the Prohibition of Chemical Weapons) through the National Non-Proliferation Council.
- There is participation in the Lead in Paint Community of Practice, and University of Cape Town Pesticide Network Community of Practice discussions.
- Griffon Poison Information Centre is a member of International Union for Pure and Applied Chemistry.
- The country participates in the Southern African Pesticide Regulatory Forum, a forum with international representation.

Challenges

- There has been limited sector response on requested letters for nominees of the multi-stakeholder Chemicals Event Response Committee.

Recommended priority actions

- Review and update the National Health Emergency Response Plan to include all major hazard sites and facilities.
- Establish formal multisectoral coordination and collaboration mechanisms involving all relevant stakeholders for chemical events.
- Conduct tabletop simulation exercises to improve chemical event surveillance and response readiness.

RE. Radiation emergencies

Introduction

To counter radiological and nuclear emergencies, timely detection and an effective response towards potential radiological and nuclear hazards/events/emergencies are required in collaboration with sectors responsible for radiation emergency management.

Target

States Parties should have surveillance and response capacity for radiation emergencies and nuclear accidents. This requires effective coordination among all sectors involved in radiation emergencies preparedness and response.

Level of capabilities

In South Africa, the National Department of Health and the Department of Energy and Electricity are the national organs of the state responsible for managing radiological and nuclear emergencies, respectively, as per the Disaster Management Act (DMA) No. 57 of 2002. The Department of Energy and Electricity oversees the coordination and management of nuclear emergencies and has developed the National Nuclear Disaster Management Plan, as mandated by the Act. Additionally, the National Department of Health is designated as South Africa's IHR National Focal Point and has assigned the Department of Energy and Electricity to lead IHR matters related to radiation emergencies.

The Department of Cooperative Governance and Traditional Affairs is responsible for National Disaster Management and has developed a joint manual for the coordination and management of radiological disasters. Cooperative agreements between relevant government entities enable effective collaboration on issues of common interest.

A robust regulatory framework, including guidelines and regulations, ensures the effective implementation of disaster management plans. Two key regulatory authorities, the National Nuclear Regulator and the South African Health Products Regulatory Authority, oversee nuclear and radiological practices. The South African Health Products Regulatory Authority, an entity under the National Department of Health, regulates radioactive materials outside of nuclear facilities under the Hazardous Substances Act of 1973, while the National Nuclear Regulator regulates nuclear emergencies and enforces emergency plans for nuclear facilities under the National Nuclear Regulator Act.

The National Nuclear Regulator Act provides a basis for emergency preparedness and response for nuclear installations and nuclear-powered vessels or those carrying radioactive materials. Regulators require license holders to develop and implement emergency response plans based on risk assessments which involve stakeholders from government entities.

Mechanisms are in place to ensure coordination, communication and implementation among national authorities and stakeholders, facilitated through advisory forums and different spheres of government. An Emergency Planning Steering Oversight Committee has also been established to monitor the implementation of emergency response plans.

South Africa has extensive capabilities for managing radiation emergencies, with well-established laboratory capabilities for radiation monitoring and analysis of food and environmental samples. The country has also ratified the International Atomic Energy Agency's Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency, and the Convention on Early Notification of a Nuclear Accident.

Indicators and scores

RE1. Mechanisms established and functioning for detecting and responding to radiation and nuclear emergencies – Score 4

The country's self-assessment score for this indicator was 4, which was retained by consensus during the external evaluation.

Strengths

- There is a well-established regulatory framework. The regulatory authorities (National Nuclear Regulator and South African Health Products Regulatory Authority) are established for regulating nuclear and radiological practices.
- The license holders are responsible for developing and maintaining the emergency preparedness and response arrangements (nuclear and radiological).
- Agreements have been established between license holders and spheres of government to ensure joint coordination of response actions.
- There is a well-documented threat assessment.
- For major nuclear installations (i.e. South African Nuclear Energy Corporation and Koeberg Nuclear Power Station (KNPS)), emergency exercises are held periodically, and evaluations are done by the National Nuclear Regulator.
- Access to international networks for assistance exist through the International Atomic Energy Agency .
- Surveillance and detection systems/arrangements are in place both at operator and regulatory levels.
- The capabilities for laboratory analysis of food and environmental samples exist for the country and are commercially available for international clients.
- The country is also recognized by International Atomic Energy Agency as expert in assessing the condition of radioactive sources and removing them from the public domain for safety and security purposes.

Challenges

- Training for emergency response functions is inadequate at the national level.
- The available training capabilities are not integrated and resourced at the national level.
- There is lack of integration of a coordinating mechanism for nuclear and radiological emergencies.

RE2. Enabling environment in place for management of radiation and nuclear emergencies – Score 4

The country's self-assessment score for this indicator was 4, which was maintained by consensus during the external evaluation.

Strengths

- The DMA provides for the development of disaster management plans to ensure prevention, risk reduction, emergency preparedness, rapid and effective response to disasters, and post-disaster recovery and rehabilitation.
- On-site and off-site emergency plans are in place for nuclear facilities which assign the roles, functions, authorities and responsibilities for emergency response. The plans are at the national, provincial, local and on-site levels.
- In terms of the DMA 2002, the National Department of Health and the Department of Energy and Electricity are the national organs of state responsible for radiological and nuclear disasters, respectively.

- South Africa is a signatory to the Conventions of Early Notification and Request for Assistance which assigns South African Nuclear Energy Corporation as the focal point for communication with the International Atomic Energy Agency on nuclear and radiological emergencies.
- There is an established regulatory framework (including guidelines and regulations) to ensure effectiveness of the implementation of disaster management plans. The National Nuclear Regulatory Act and Hazardous Substances Act and applicable regulations require license holders to develop emergency plans.
- Emergency exercises are conducted regularly with nuclear authorization holders. Radiological emergency exercises are conducted periodically. South Africa has access to the Response and Assistance Network through the International Atomic Energy Agency as signatory to the Emergency Notification and Assistance Conventions. This is applicable for both nuclear and radiological emergencies.

Challenges

- The regulatory framework for preparedness and response to radiological emergencies needs to be harmonized at the policy level.
- Some of the disaster management plans for radiological emergencies need to be reviewed regularly.

Recommended priority actions

- Strengthen the coordinating mechanism between the National Department of Health and Department of Energy and Electricity through a memorandum of agreement.
- Expand the nuclear and radiation emergency training into a national training programme that is based on the International Atomic Energy Agency Capacity Building Centre initiative/ support. Make the training available on-demand for all relevant sectors.
- Formalize the involvement of all relevant sectors, such as Border Management Authority at POE, in periodic radiation emergency exercises, through a memorandum of understanding.

Annex: JEE background

Mission location and duration

Johannesburg, South Africa, 16–20 September 2024

Mission team members

	Name	Agency or affiliate multilateral
1	Aimee Geissler	Team lead, United States Centers for Disease Control and Prevention *(collaboration preceded 20 January 2025)*
2	Miriam Nanyunja	Co-lead, WHO Regional Office for Africa
3	Ojo Olubunmni	Independent expert
4	Jacob Lusekelo	Ministry of Health, United Republic of Tanzania
5	Nabeerl Cader Hassam	Radiation Protection Agency
6	Anoko Juliene	WHO Regional Office for Africa
7	Makamure Tendai	WHO Regional Office for Africa
8	Kakulu Remedius	Ministry of Health, United Republic of Tanzania
9	Naomi Ngaruiya	International Federation of Red Cross and Red Crescent Societies
10	Zandile Dhlamini	Ministry of Foreign Affairs of Eswatini
11	Hani Mahmoud	Regional Technical Support Hub
12	Kola Jinadu	WHO Regional Office for Africa
13	Mathew Tut Kol	Africa CDC
14	Tumisang Malebo Madisa	Independent expert
15	Batsirai Mnbo	Africa CDC - Observer
16	Tichaona Fambrai	Africa CDC - Observer
17	Naseema Noor	United States Agency for International Development (USAID) – Observer *(collaboration preceded 20 January 2025)*

Objective

To assess South Africa's capacities and capabilities relevant to the 19 technical areas of the JEE tool for providing baseline data to support the country's efforts to reform and improve their public health security.

JEE process

The JEE process was a peer-to-peer review and a collaborative effort between South Africa technical experts and JEE team members. To prepare for the external evaluation, the Government of South Africa took the first step by conducting a self-evaluation in July 2024 in Johannesburg, South Africa. During this phase, they provided information regarding their capacities and challenges, utilizing the indicators and technical questions specified in the JEE tool, and further proposed scores for each indicator. Throughout the external evaluation, discussions were held pertaining to the proposed scores, strengths/best practices, challenges and priority actions for the 19 technical areas. This was conducted in a collaborative manner, with the South Africa technical experts and JEE external team of experts achieving consensus agreement.

JEE scores

1 = No capacity

2 = Limited capacity

3 = Developed capacity

4 = Demonstrated capacity

5 = Sustainable capacity

List of participants

	Name	Agency or affiliate multilateral
1	Matle, Itumeleng	Agricultural Research Council
2	Booman, Aart	Border Management Authority
3	Maharaj, Dinesh	Border Management Authority
4	Masindi, Pfarelo	Border Management Authority
5	Moagi, Cornelius	Border Management Authority
6	Mohoto, Jostina	Border Management Authority
7	Teffu, Paul	Border Management Authority
8	Le Roux, Jean	Border Management Authority/O.R. Tambo Airport
9	Makgale, David	Bojanala Platinum District Municipality - Disaster
10	Chituku, Phyllis	Clinton Health Access Initiative
11	Leonard, Elizabeth	Clinton Health Access Initiative
12	Ngubane, Gugulethu	Clinton Health Access Initiative
13	Cloete, Alicia	Department of Agriculture, Land Reform and Rural Development
14	Matsemela, Khomotso	Department of Agriculture, Land Reform and Rural Development
15	Modisane, Botlhe	Department of Agriculture, Land Reform and Rural Development
16	Dubazana, Sibusiso	Department of Mineral Resources and Energy
17	Motsumi, Teboho	Department of Mineral Resources and Energy
18	Pie, Thabiso	Department of Mineral Resources and Energy
19	Boshoff, Heila	Free State Department of Health
20	Dlamini, Thomas	Eastern Cape Department of Health
21	Qitsi, Nomvana Victoria	Eastern Cape Department of Health

	Name	Agency or affiliate multilateral
22	Singashe-Mgobo, Nosiphiwo	Eastern Cape Department of Health
23	Tyalisi, Nomalungisa	Eastern Cape Department of Health
24	Lewis, Phidza	Eskom
25	Leshabane, Lucky	Free State Department of Health
26	Lodewyk, Henrihette	Free State Department of Health
27	Modise, Motshabi	Free State Department of Health
28	Mojapelo, Kristan	Free State Department of Health
29	Khumalo, Pinkie	Gauteng province Department of Health
30	Matjokotja, Tebogo	Gauteng province
31	Mnisi, Christina	Gauteng province
32	Mohajane, Kealeboga	Gauteng province
33	Mokgetle, Refilwe	Gauteng province
34	Mokoena, Innie	Gauteng province
35	Mosenye, Esther	Gauteng province
36	Nakedi, Makoloi	Gauteng province
37	Neti, Mzimasi	Gauteng province
38	Yemi, Akerele	Gauteng province
39	Barnes, Zolani	Jhpiego
40	Dinga, Aphiwe	Jhpiego
41	Lamola, Teresa	Jhpiego
42	Rwafa, Teurai	Jhpiego
43	Khumalo, Kumbuzile	KwaZulu-Natal province
44	Mabaso, Sindisiwe	KwaZulu-Natal province
45	Mbatha, Sduduzo Langa	KwaZulu-Natal province
46	Mhlongo, Babongile	KwaZulu-Natal province
47	Ngozo, Jaqueline	KwaZulu-Natal province
48	Makungo, Unarine	Limpopo province Department of Health
49	Poopedi, Ananias	Limpopo province Department of Health
50	Ranoto, Queen	Limpopo province Department of Health
51	Bhiya, Pertunia	Mpumalanga province Department of Health
52	Mahlalela, Maria	Mpumalanga province Department of Health
53	Mpangane, Hluphi	Mpumalanga province Department of Health
54	Phiri, Phumzile	Mpumalanga province Department of Health
55	Zikalala, Zithelo	Mpumalanga province Department of Health
56	Zwane, Mandla	Mpumalanga province Department of Health
57	Gobvu, Todwell	Médecins Sans Frontières
58	Kuissen, Patrick	Médecins Sans Frontières
59	McAravey, Camren	Médecins Sans Frontières

	Name	Agency or affiliate multilateral
60	Ndoro, Munya	Médecins Sans Frontières
61	Rusilze, Ashley C	Médecins Sans Frontières
62	Sulaiman, Zureenah	Médecins Sans Frontières
63	Guluwa, Sisipho	Northern Cape province Department of Health
64	Hottie, Gloria	Northern Cape Department of Health
65	Jackals, Kehilwe	Northern Cape Department of Health
66	Kesiamang, Lesedi	Northern Cape Department of Health
67	Plaatjies, Selelo	Northern Cape Department of Health
68	Son, Marton	Northern Cape Department of Health
69	Bam, Zina	National Department of Health
70	Bhengu, Charity	National Department of Health
71	Buthelezi, Gcinile	National Department of Health
72	Campbell, Penny	National Department of Health
73	Cele, Aneliswa	National Department of Health
74	Furumele, Tsakani	National Department of Health
75	Hlungwani, Patrick	National Department of Health
76	Kgalushi, Nomthi	National Department of Health
77	Khanyile, Victor	National Department of Health
78	Khosa, Solani	National Department of Health
79	Khoza, Ben	National Department of Health
80	Khumalo, Mbhekiseni	National Department of Health
81	Lembethe, Ayanda	National Department of Health
82	Loykisoonlal, Ramsook	National Department of Health
83	Madlala, Sidu	National Department of Health
84	Mahlako, Kgwiti	National Department of Health
85	Mainganye, Mashudu	National Department of Health
86	Malema, Daphney	National Department of Health
87	Maseti, Elizabeth	National Department of Health
88	Masilela, Pam	National Department of Health
89	Mdlalose, Siyabonga	National Department of Health
90	Menyatso, Albertina	National Department of Health
91	Moabelo, Kgorohlo	National Department of Health
92	Mokoena, Nomkhosi	National Department of Health
93	Mosimege, Keolebogile	National Department of Health
94	Mphilo, Rudzani	National Department of Health
95	Mudzanani, NeSongozwi	National Department of Health
96	Myburgh, Erica	National Department of Health
97	Ndala, Paul	National Department of Health

	Name	Agency or affiliate multilateral
98	Nkuna, Daniel	National Department of Health
99	Parring, Shirley	National Department of Health
100	Phadziri, Mpho	National Department of Health
101	Ramkrishna, Wayne	National Department of Health
102	Ratya, Lusizo	National Department of Health
103	Ravhengani, Maggie	National Department of Health
104	Roos, Anne	National Department of Health
105	Seabi, Caroline	National Department of Health
106	Sityebi, Vuyokazi	National Department of Health
107	Bongweni, Funeka	National Department of Health/Border Management Authority
108	Mamogale, Phaswa	National Department of Health/Finance
109	Coetzer, Anton	South African Nuclear Energy Corporation
110	Kekana, Mologadi	South African Nuclear Energy Corporation
111	Pfariso, Ramaofisi	South African Nuclear Energy Corporation
112	Moodliar, Sarvashni	National Health Laboratory Service
113	Govender, Nevashan	National Institute for Communicable Diseases
114	Howard, Wayne	National Institute for Communicable Diseases
115	Manamela, Morubula	National Institute for Communicable Diseases
116	Masuku, Zibusiso	National Institute for Communicable Diseases
117	Ntshoe, Genevie	National Institute for Communicable Diseases
118	Nzenze, Susan	National Institute for Communicable Diseases
119	Perovic, Olga	National Institute for Communicable Diseases
120	Sabani, Vuyo	National Institute for Communicable Diseases
121	Trataris-Rebisz, Anastasia	National Institute for Communicable Diseases
122	Weyer, Jacqueline	National Institute for Communicable Diseases
123	Wolter, Nicole	National Institute for Communicable Diseases
124	Mathulwe, Esther	North West province
125	Mongologa, Gift	North West province
126	Ramotsho, Samuel	North West province
127	Seema, Mogogodi Junior	North West province
128	Diale, Boitshoko	South African Health Products Regulatory Authority
129	Van Geems, Hannemi	South African Military Health Service
130	Motloung, Bontle	UNICEF
131	Chai, Shuen	United States of America Treasury *(collaboration preceded 20 January 2025)*
132	Baloyi-Modibedi, Marcia	USAID *(collaboration preceded 20 January 2025)*
133	Magwedere, Kudakwashe	USAID *(collaboration preceded 20 January 2025)*
134	Tilout, Katherine	USAID *(collaboration preceded 20 January 2025)*
135	Mnyapa, Nkazimlo	Western Cape province Department of Health

	Name	Agency or affiliate multilateral
136	Kiteng, Marcel	WHO
137	Mokoena, Sbongile	WHO
138	Moonasar, Devanand	WHO
139	Mthethwa, Simangele	WHO
140	Mugero, Charles	WHO
141	Ntsieni Ramalwa-Sekhwama	WHO
142	Setumo, Dikeledi	WHO
143	Takalani Nemungadi	WHO
144	Wamala, Joseph	WHO

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- Nomination letter of a Food Safety Contact Point
- Screenshot World Organisation for Animal Health Contact Point contact details
- Presentation slide showing stakeholder communication
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- INFOSAN and IHR communications
- Screenshot of Food Safety Alert contact list
- Departmental communication protocol / Incident Management Team protocol
- Food Legislation Advisory Group attendance register
- Recall feedback sheet template; completed recall feedback sheet September 2021 for Appletiser; Food Safety Alert communication
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- Vaccinator's Manual - Expanded Programme on Immunisation in South Africa (https://knowledgehub.health.gov.za/elibrary/vaccinators-manual-expanded-programme-immunisation-south-africa-epi)
- Polio Outbreak Simulation Exercise (POSE) in South Africa (https://www.afro.who.int/countries/south-africa/news/polio-outbreak-simulation-exercise-pose-south-africa)
- Expanded Programme on Immunization schedule 2015 (https://knowledgehub.health.gov.za/elibrary/vaccinators-manual-expanded-programme-immunisation-south-africa-epi)
- Expanded Programme on Immunization schedule 2024
- Rabies (general documents) (https://www.nicd.ac.za/diseases-a-z-index/rabies/)
- Reaching Every District (RED) Manual 2015 version
- IHR JEE 2017
- eSPAR 2023
- NAPHS
- Microplans
- National Immunisation Strategic Plan
- COVID-19 vaccination toolkit and standard operating procedures (https://knowledgehub.health.gov.za/elibrary/covid-19-vaccine-implementation-guide-and-toolkit)
- Cold chain inventory 2023

National laboratory system

- National Health Act No. 61 of 2003
- National Health Laboratory Services Act No. 37 of 2000
- Annual Report, Agricultural Research Council 2021/22
- Annual Report National Health Laboratory Service, 2022/23
- List of World Health Organization-designated laboratories for HIV drug resistance surveillance, October 2021
- List of Veterinary Laboratories Audited, Directorate Animal Health, 2019–2023
- Performance of Veterinary Services Evaluation Report, OIE, October 2012
- Procedure Manual, Department of Agriculture, Forestry and Fisheries, Approval of Veterinary Services 2018
- List of Directorate Animal Health Audited Laboratories and List of Directorate Animal Health Approved Laboratories

Surveillance

- National Department of Health (https://www.health.gov.za/)
- National Institute for Communicable Diseases (https://www.nicd.ac.za)
- Regulations relating to the surveillance and control of notifiable medical conditions (https://www.nicd.ac.za/wp-content/uploads/2017/12/41330 15-12 Health-compressed.pdf)
- Monthly surveillance reports (https://www.nicd.ac.za/nmc-overview/nmc-monthly-surveillance-report/)
- Public Health Bulletin South Africa (https://www.phbsa.ac.za/)
- Respiratory pathogens report (https://www.nicd.ac.za/wp-content/uploads/2024/07/Resp Path Report 2024 29 20240725 final.pdf)
- Wastewater surveillance (https://www.nicd.ac.za/diseases-a-z-index/disease-index-covid-19/surveillance-reports/weekly-reports/wastewater-based-epidemiology-for-sars-cov-2-in-south-africa/)
- Tracking SARS-CoV-2 Variants: SARS-CoV-2 Genomic Surveillance Update (https://www.nicd.ac.za/diseases-a-z-index/disease-index-covid-19/sars-cov-2-genomic-surveillance-update/)
- Surveillance reports (https://www.phbsa.ac.za/surveillance-reports/)
- Epidemiological reports (https://www.phbsa.ac.za/respiratory-pathogen-epidemiology-from-the-systematic-influenza-like-illness-and-pneumonia-surveillance-programmes/)
- List of controlled and notifiable animal diseases in terms of the animal diseases act, 1984 (Act No. 35 of 1984) (https://www.sahpra.org.za/document/animal-diseases-act-1984-act-no-35-of-1984/)
- Animal health (https://wahis.woah.org/#/in-review/5658)

Human resources

- 2030 Human Resources for Health Strategy, October 2020
- Annual Performance Plan for implementation of the HRH strategy
- Health Workforce Consultative Advisory Forum Terms of Reference
- Joint Health Sciences Education Committee Terms of Reference
- Labour Market Analysis Report
- Report of the Costing of the National 2030 Human Resources for Health Strategy
- Guideline on surge capacity for the HRH response to COVID-19 pandemic
- Caring for the careers strategy
- Government Gazette No. 457 (2020 Regulations on HRH recruitment)
- Community Service Policy
- Rural Allowance Policy
- Foreign Health Workforce Policy
- Commuted Overtime policy

Health emergency management

- National Strategic Tool for Assessing Risks Report
- National Health Emergency Response Operations Plan South Africa
- Disaster Management Plan KwaZulu-Natal
- National Strategy for health security and emergencies in South Africa 2022–2030
- Risk and Vulnerability Assessment Health Synthesis Report
- Surveillance Impact-based Weather Warning for Eastern Cape Damaging Winds
- Surveillance Impact-based Weather Warning for Western Cape - Veld Fire Conditions
- Surveillance South African Weather Service Damaging Winds

- Surveillance South African Weather Service Veld Fires
- Surveillance mpox External Sitrep
- Notifiable Medical Conditions Surveillance System Report
- Action Plan KwaZulu-Natal Case-based Surveillance Reporting
- Core Capacities and Health Hazard Risk and Vulnerability Assessment Tool
- Pandemic Preparedness Plan – respiratory pathogen pandemics in South Africa
- Contingency Plan - Cholera
- Contingency Plan - Civil Unrest
- Contingency Plan - COVID Variant of Concern
- Contingency Plan - Fires
- Contingency Plan - Floods
- Contingency Plan - Storms
- Contingency Plans - Transportation Accidents
- PHEOC Activation and Deactivation Standard Operating Procedures
- PHEOC Handbook South Africa
- PHEOC Information Management
- PHEOC Organogram
- PHEOC Sitreps
- PHEOC Field Hospital
- PHEOC Surge Staff
- PHEOC Terms of Reference
- PHEOC Daily Reports
- Multisectoral National Outbreak Response Team Terms of Reference
- After-action Review Cholera (2014 and 2022)
- After-action Review COVID-19
- Guidelines Viral Hepatitis
- Guidelines COVID-19
- Guidelines Cholera
- National Plan for COVID-19 response
- National Search and Rescue Regulatory Framework
- Southern African Development Community Protocol on Health 1999
- Human Resources for Health Strategy
- Strategy to protect the health and safety of health workers
- Guidance notes to develop surge capacity for human resources response to COVID-19, 28 August 2020
- National Surveillance Centre Dashboards and Monitoring Medicine Availability Presentation
- Guideline for Section 21 Access to Unregistered Medicines
- Donation of medicines, medical devices and in-vitro diagnostics
- Managing Medicines Availability
- National Core Standards Dashboards Manual and Screenshots
- National Health Research Strategy 2021–2024
- Framework for Implementation of One Health in South Africa
- One Health Joint Plan of Action 2022–2026

- One Health Joint Plan of Action implementation at national level
- Update of South Africa sequencing data from the Global Initiative on Sharing All Influenza Data (GISAID)
- National Department of Health, Health Research Guidelines, 2024
- Council for Scientific and Industrial Research (https://www.csir.co.za/)
- Human Science Research Council (https://hsrc.ac.za/)
- Agricultural Research Council (https://www.arc.int/)
- South African Medical Research Council (https://www.samrc.ac.za/)

Linking public health and security authorities

- Signed memorandum of agreement between the South African Police Service and National Department of Health, 25 September 2019
- National Health Act, 2003 (Act No.61 of 2003)
- National Department of Health and South African Police Service Integrated Plan, June 2019
- Guidelines for Quarantine and Isolation in Relation to COVID-19 Exposure and Infection

Health service provision

- National Institute for Communicable Diseases, Diseases A-Z Index (https://www.nicd.ac.za/diseases-a-z-index/)
- Ideal Health Facility documents, Department of Health, South Africa (https://www.idealhealthfacility.org.za/users/common/documents.php

Infection prevention and control

- Regulated norms and standards applicable to different health establishments (sections 7, 8, 9)
- Infection Prevention and Control Assessment Framework reports
- Global Point Prevalence Survey reports 2022 and 2023
- Surveillance reports – monthly
- National IPC Strategic Framework, 2020
- Practical Manual for Implementation of the IPC Strategic Framework
- GERMS South Africa Report, 2022
- List of appointed IPC coordinators in central, tertiary and regional hospitals
- National IPC Committee appointment letters with terms of reference and quarterly meeting minutes 2023/2024
- Infection control risk management reports 2023/2024 financial year

Risk communication and community engagement

- After-action Review National Department of Health RCCE COVID-19 Lessons Learnt
- Cholera Truck
- Cholera Readiness Checklist Provincial, December 2023
- Communication Plan three months, 2018
- Final Update Bulletin May 2024 dissemination (unpublished report)
- National Cholera Guideline RCCE
- Guidelines National RCCE Campaign Development Resource Guide
- Guidelines UNICEF National Department of Health Reach Every District Draft
- Handwash Plan, 2019

- Health Promotion Directorate Operational Plan, 2024
- Minutes of Risk Communication Community Engagement Team, 2018
- National RCCE Campaign Development Resource Guide, 2023
- Messages for Travelers
- North West Province Cholera Response Plan, 2023
- Project Last Mile (PLM) COVID-19 RCCE Close out Report, 2024 (unpublished report)
- PLM National RCCE Campaign Development Resource Guide, 2023
- PLM National Department of Health RCCE COVID-19 Lessons Learnt, 2023
- PLM Vulnerable Populations Campaign Impact Report and Toolkit, 2023
- District Health Management Information System Policy
- Provincial Workshops Programme
- Provincial Workshops Programme Mpumalanga province, 2018
- RCCE cholera outbreak response, 9 June 2023
- Limpopo province Risk Communication Listeriosis Workshop Report
- Mpumalanga province Risk Communication Workshop Report
- Report mpox June Talkwalker
- Vulnerable Populations Campaign Impact Report and Toolkit, 2023
- RCCE key messages for cholera outbreaks, World Health Organization, February 2023
- Risk Communication Provincial Visits
- Standard Operating Procedure 1 National Level, 2024
- Standard Operating Procedure 2 Provincial level, 2014
- Standard Operating Procedure 3 District Level, 2014
- Standard Operating Procedure 4 Subdistrict, 2014
- Standard Operating Procedure Facility Level
- Communication toolkit for cholera, 2024
- Vulnerable Populations Campaign Impact Report and Toolkit, 2023
- Training attendance register, risk communication workshop
- Training attendance register RCCE World Health Organization Training John Taolo Gaetsewe (JTG) District Taxi and Religious Sector, 14 July 2021
- Training attendance register RCCE World Health Organization Training Zf Mkhwane (ZFM) District Officials, 9 July 2021
- Training attendance register RCCE World Health Organization Training ZFM Religious Leaders, 8 July 2021
- Training attendance register RCCE World Health Organization Training ZFM Taxi Association, 8 July 2021
- National Training on RCCE
- UNICEF Mobilization truck activations report
- Web DHIS User Manual 2023
- RCCE systems sustained and integrated beyond COVID-19
- COVID-19 Vaccine Survey (CVACS), University of Cape Town, 2022
- (https://gender.cgiar.org/publications/covid-19-vaccine-survey-2022-survey-2-south-africa)
- University of Johannesburg /Human Science Research Council COVID-19 Democracy Survey shows decline in vaccine hesitancy but highlights inequalities in vaccination coverage, 2022 (https://news.uj.ac.za/news/uj-hsrc-covid-19-democracy-survey-shows-decline-in-vaccine-hesitancy-but-highlights-inequalities-in-vaccination-coverage-2/)
- A large-scale, cross-sectional survey of South African adults' perceptions and behavioural responses

towards the COVID-19 pandemic. Conducted by University of Witwatersrand, 2020 (https://www.wits.ac.za/media/wits-university/research/coe-human/documents/CoE-HUMAN-Covid-19-Think-Tank%20Report.pdf)

- Behavioural and health impacts of the COVID-19 pandemic in South Africa, 2020 (https://www.statssa.gov.za/publications/Report-00-80-02/Report-00-80-022020.pdf)
- South Africa faces particular structural barriers to behavioural change amidst pandemic University of Stellenbosch, 2021 (https://www0.sun.ac.za/psychology/2021/07/27/sa-faces-particular-structural-barriers-to-behavioural-change-amidst-pandemic%E2%80%8B%E2%80%8B/)
- Towards a conceptual understanding of community engagement in higher education in South Africa (https://journals.ufs.ac.za/index.php/pie/article/download/3458/3291/6508)
- National Department of Health COVID-19 After-Action Review Workstream 5: Communities, 23–24 November 2022 (unpublished report)
- Cholera Outbreak Response and After-Action Review, 30 August 2023 (https://www.afro.who.int/countries/south-africa/news/cholera-outbreak-response-and-after-action-review)
- Hygiene kit distribution combined with health promotion (unpublished guide) and Household WASH Evaluation with the following topics:
  - Household Demographics and Illness
  - Hygiene Kit Distribution
  - Health Promotion and Knowledge
  - WASH
- Cholera Treatment Unit supported by Médecins Sans Frontières plays key role in Hammanskraal cholera response (https://www.msf.org.za/news-and-resources/latest-news/cholera-treatment-unit-supported-msf-plays-key-role-hammanskraal)
- OpenWHO Infodemic management channel (https://openwho.org/channel/Infodemic%2Bmanagement/499738)
- UNICEF Agora learning platform (infodemic insights report templates) (https://agora.unicef.org/)
- Viral Facts Africa Initiative to combat dangerous heath misinformation (https://www.afro.who.int/news/viral-facts-africa-initiative-combat-dangerous-health-misinformation)
- South Africa Social Listening and Infodemic Management Report

Points of entry and border health

- Core capacity assessment spreadsheets
- Core capacity assessment reports
- POE core capacity action plans
- World Health Organization assessment tool for core capacity requirements at designated airports, ports and ground crossings
- Draft IDSR Strategy
- National Department of Health Strategic Plan 2020/2021–2023/2024
- National Vector Control Strategy
- Border Management Authority Strategic Plan
- Border Management Authority Annual Performance Plan
- Standard operating procedure for application of health measures
- Scope of Profession for Environmental Health Practitioners
- Health Professions Act, 1974 (Act 56 of 1974)
- Public Health Emergency Contingency Plans
- Minutes of Port Management Committee meetings
- Minutes/terms of reference for outbreak response teams

- Administrative Arrangements with the Health Facilities
- Administrative Arrangements with Emergency Medical Services
- List of Environmental Health Practitioners at POE
- Port Health Services Standard Operating Procedures
- Guideline on the Development of Public Health Emergency Plans in POE
- Implementation Protocol between the National Department of Health and Border Management Authority
- Guidelines for Epidemic Preparedness and Response
- International Health Regulations Act, 1974
- Notifiable Medical Conditions Regulations
- Draft Regulations Relating to Public Health Measures in POE
- Aviation Pandemic Preparedness Plan
- Multisectoral National Outbreak Response Team Terms of Reference
- Risk Assessment tools for previous outbreaks/public health events
- National Department of Health Annual Report
- Memorandum of understanding with neighbouring countries on health issues
- Cholera Guidelines
- mpox Guidelines
- Guidelines for isolation and quarantine
- Environmental Health Guidelines
- Disaster Management Act, 57 (Act No. 57 of 2002)
- Health Directives developed during COVID-19
- After-action review for previous public health events (cholera, COVID-19)

Chemical events

- National Disaster Management Act
- Occupational Health and Safety Act
- Manual: Joint Management of Incidents involving Chemical, Biological Agents, or Radioactive Materials
- National Implementation Plan for The Minamata Convention on Mercury, Department of Forestry, Fisheries and the Environment, 2021
- Final National Action Plan for Strategic Approach to International Chemicals Management (SAICM) Emerging Pollutants in South Africa, Department of Forestry, Fisheries and the Environment, 2022
- National Health Emergency Response Operations Plan, National Department of Health, 2022
- Chemical poisoning investigation guidelines for EHPs, National Department of Health
- National Department of Health policies (Health Systems Act; Foodstuffs, Cosmetics and Disinfectants Act; Maximum Residue Limits in Foodstuffs Regulations, Notifiable Medical Conditions Regulations
- National Department of Health-public health facilities list
- Department of Cooperative Governance and Traditional Affairs policies (Disaster Management Act No. 57 of 2002)
- Department of Cooperative Governance and Traditional Affairs Disaster Management Monitoring and Evaluation Framework, March 2014
- Fire Brigade Services Act, 1987 (Act No. 99 of 1987)
- National Fire Safety and Prevention Strategy, 2006

- Department of Employment and Labour legislation
- Department of Water and Sanitation legislation
- Department of Agriculture legislation
- Department of Trade, Industry and Competition legislation
- Sustainable Development Goals Country Report, Statistics South Africa, 2023
- Food and Drug Assurance Laboratory chemical analysis report
- Council for Scientific and Industrial Research - chemical laboratory SANAS accreditation certificate
- Interprovincial Meeting Report, KwaZulu Natal Department of Health, 31 August 2023
- Multi-stakeholder Committee on Chemicals Management (MCCM) report on poison data, November 2023
- MCCM November 2023 meeting
- Compulsory Specifications for Chemical Disinfectants, VC 8054, National Regulator for Compulsory Specifications
- Thembelihle Local Municipality Land Use Scheme, 2022

Radiation emergencies

- Hazardous Substances Act (Act No. 15 of 1973)
- Disaster Management Act (Act No. 57 of 2002)
- Nuclear Energy Act, 1999 (Act No. 46 of 1999)
- National Nuclear Regulatory Act (Act No. 47 of 1999)
- Nuclear Energy Policy of 2008
- National Nuclear Regulator Requirement documents (RD 006-012, RD 014, RD 038, etc)
- Guidance Documents (RG-0020, etc.)
- South African Health Products Regulatory Authority Regulations (RN-GLN-EPR-001, R690, R247, etc.)
- National Nuclear Disaster Management Plan of 2005
- Laboratory accreditation (i.e. SANAS Accreditations, SANS 17205 etc. for radiological analysis)
- Emergency preparedness and response training programme (course material/curriculum, standard operating procedures)
- Procedures and Risk Assessment guidelines on Radiation Monitoring
- National Department of Health Standard Operating Procedures, guidelines on case management for over-exposure to ionizing radiation
- National Nuclear Regulator/South African Health Products Regulatory Authority guidelines on evaluation/audit of emergency exercises
- Emergency Preparedness and Response Information Management System, International Nuclear and Radiological Event Scale, Integrated Radiological Monitoring Information System reports, etc.
- Emergency Planning and Security Operational Committee Terms of Reference

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