

Progress on Public Health Emergencies in South Africa (including IHR (2005), STAR & Contingency Planning)

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A close-up photograph of a light-colored wooden letter 'A' resting on a surface with a blue grid pattern. The letter is positioned in the lower-left quadrant of the image, casting a soft shadow to its right. The grid lines are thin and intersect at right angles, creating a perspective effect that draws the eye towards the letter.

Presentation Outline

- IHR
- JEE/ ESPAR
- NAPHS
- All Hazard Risk Assessment using the STAR (Strategic Tool for All Hazard Risk)
- NHEROP
- PHEOC
- Contingency Planning

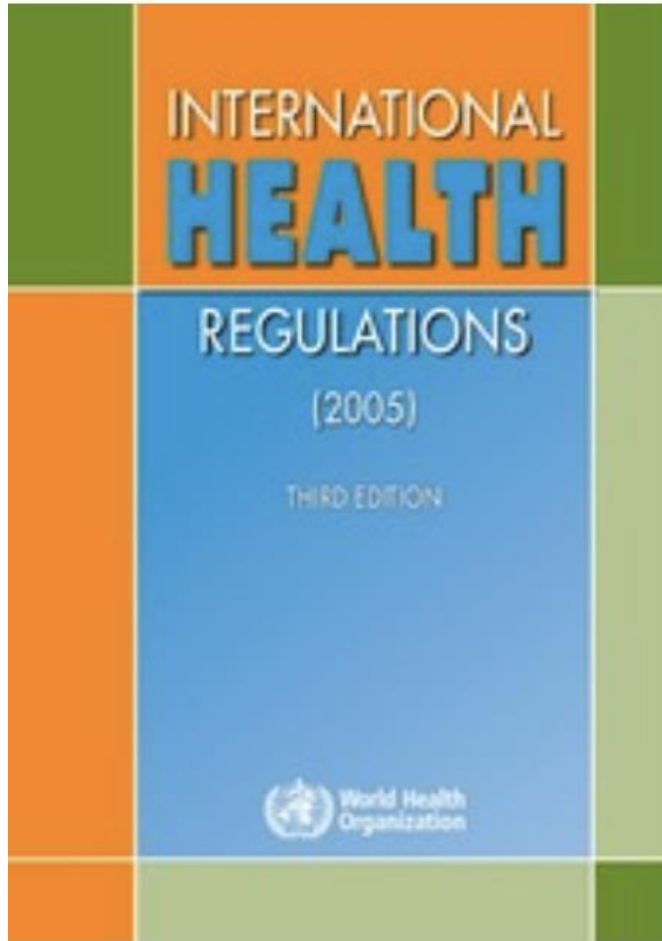
International Health Regulations (IHR 2005) and IHR Monitoring and Evaluation Framework for Enhancing Global Health Security



Introduction - 1

- The World is now a global village; an infected individual can travel from country to country and from continent to continent in a few hours
- COVID-19 pandemic and other multi-country infectious disease outbreaks e.g. Ebola, Zika, Dengue, etc. have raised global awareness of the importance of global health security and emergency preparedness
- Ensuring global health security is a priority for all. ***“When the world is collectively at risk, defense becomes a shared responsibility of all nations.”***
– Dr Margaret Chan

International Health Regulations (IHR 2005)



Came into force on 15 June 2007

The IHR (2005) has as purpose and scope "to prevent, protect against, control and provide a public health response to the international spread of disease in ways that are commensurate with and restricted to public health risks, and which avoid unnecessary interference with international traffic and trade"

All States Parties are required to have or to develop **minimum core public health capacities to implement the IHR 2005 effectively.**

(IHR, Art. 13)

IHR Core Public Health Capacities

Core capacities

- Legislation and Policy
- Coordination
- Surveillance
- Response
- Preparedness
- Risk Communications
- Human Resources
- Laboratory

3 levels

- National
- Intermediate
- Peripheral/Community

Potential Hazards

- Biological
 - Infectious
 - Zoonosis
 - Food safety
- Chemical
- Radio nuclear

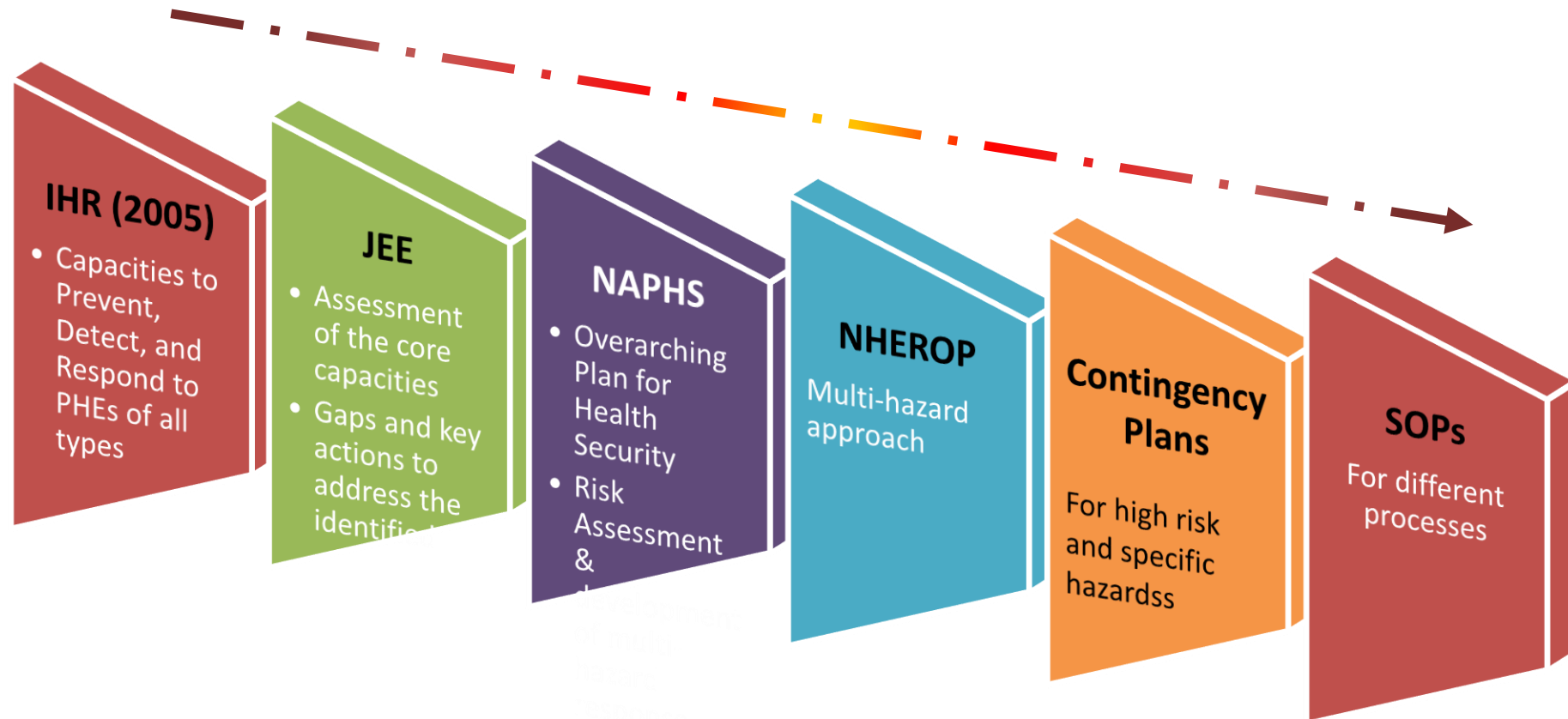
Events at Points of Entry
Linking PH with security



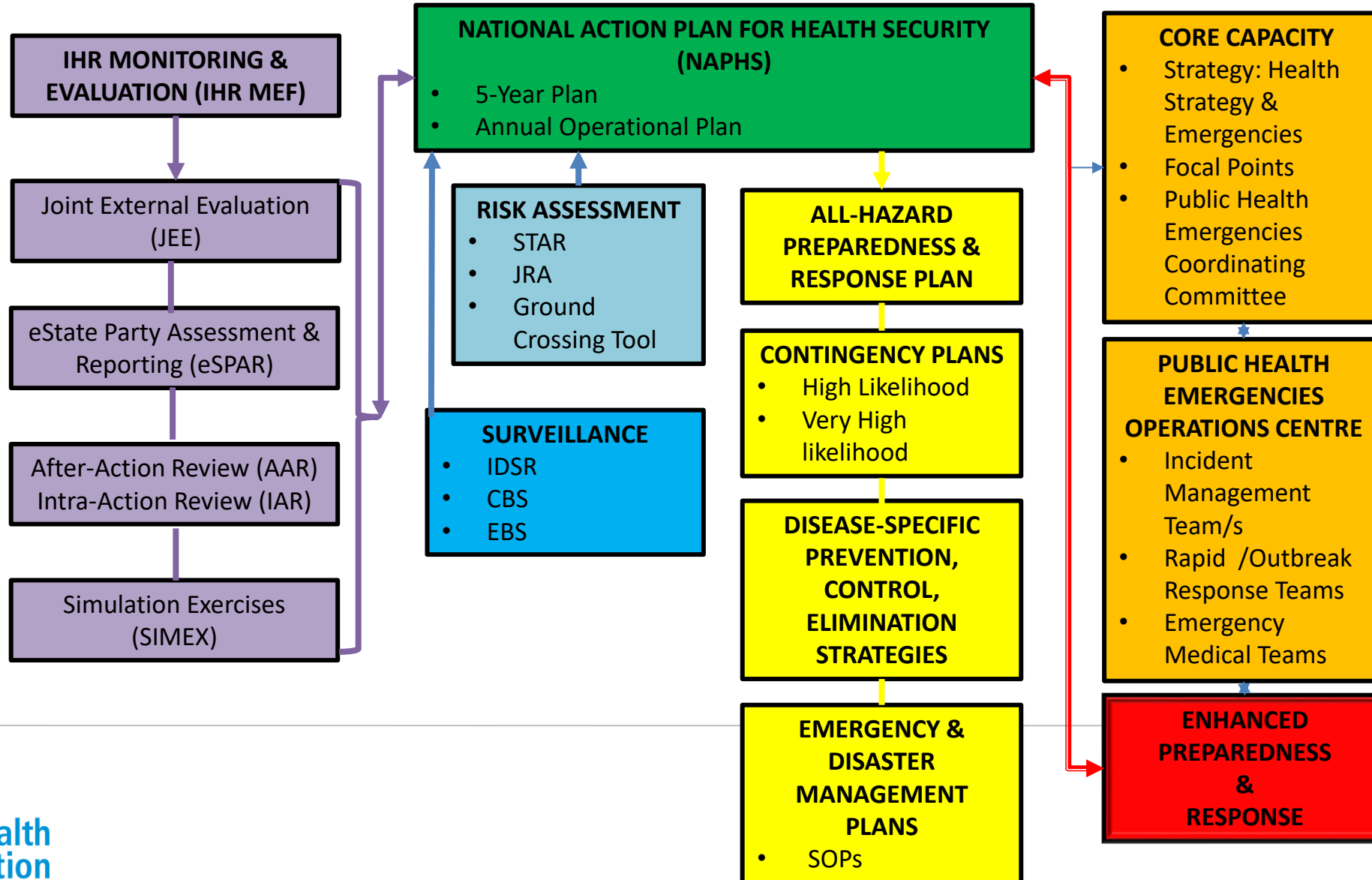
IHR

KEY PROCESSES/ACTIVITIES

South Africa is bound by the IHR Act 28 of 1974 which came into force on 15 June 2007.



EMERGENCY PREPAREDNESS & RESPONSE APPROACH



Joint external evaluation 3.0

PREVENT

1. Legal Instruments
2. Financing
3. IHR Coordination, National IHR Focal Point Functions and Advocacy
4. Antimicrobial Resistance
5. Zoonotic Disease
6. Food Safety
7. Biosafety and Biosecurity
8. Immunization

DETECT

9. National Laboratory System
10. Surveillance
11. Human Resources

RESPOND

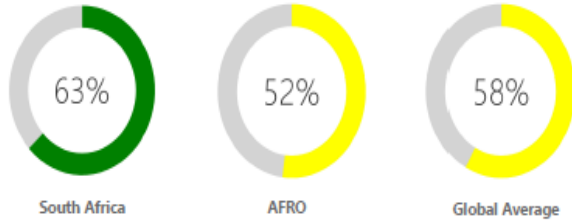
12. **Health Emergency Management**
13. Linking Public Health and Security Authorities
14. Health Services Provision
15. Infection Prevention and Control
16. Risk Communication and Community Engagement

IHR RELATED HAZARDS & POINTS OF ENTRY & BORDER HEALTH

17. Points of Entry and Border Health
18. Chemical Events
19. Radiation Emergencies

In accordance with Article 54 of The International Health Regulations (2005) and WHA resolution 61.2, all IHR States Parties and WHO are required to report to the WHA on a yearly basis on their implementation of the Regulations. This country profile provides an overview of the progress achieved as reported by this State Party in achieving selected elements of the core public health capacities required in the context of the International Health Regulations (2005), especially under Annex 1 of these Regulations.

All Capacities Average

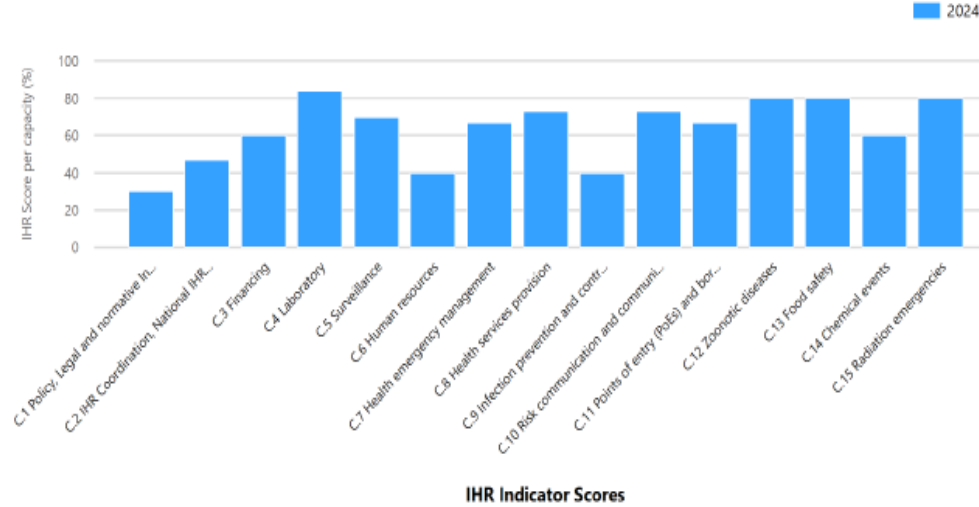


Designated Points of Entry

0 Ports **10** Airports **0** Ground Crossings

Authorized ports to issue ship sanitation certificates: **Yes**

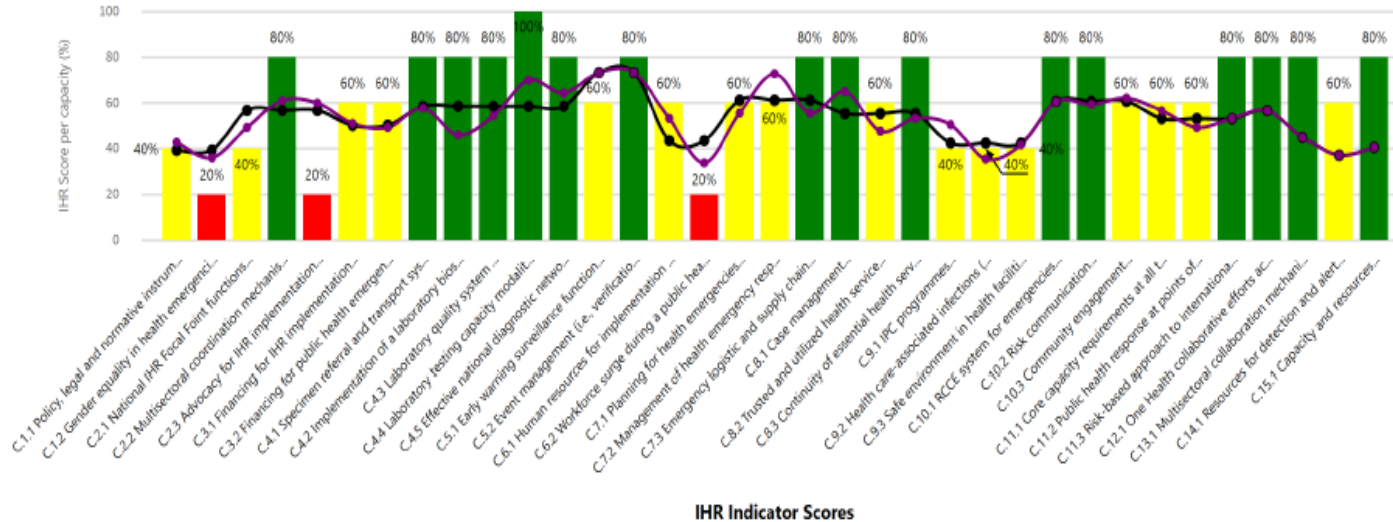
IHR Capacity



**Poor performing indicators-
(scoring 20%):**

- P1.2 Gender equity and equality in health emergencies
- D3.4 Workforce surge during a public health event
- P3.1 IHR coordination, national IHR focal point functions and Advocacy

IHR Indicators



Linkages between IHR, JEE & NAPHS

- The **IHR provides the overarching legal framework** and obligations for countries to develop core capacities.
- The **JEE serves as a diagnostic tool to evaluate these capacities** and identify areas needing improvement.
- The **NAPHS translates the findings from the JEE into actionable plans**, ensuring that countries can systematically address gaps and strengthen their health security infrastructure.



STRATEGIC TOOL FOR ASSESSING RISKS (STAR)

Photo: WHO/Syria



World Health
Organization

HEALTH
EMERGENCIES
programme

programme

What is STAR

What is the STAR?

- The Strategic Tool for Assessing Risk (STAR) is a set of tools, **used to assess public health risks and determine those risks to be prioritized** using a combination of hazards identification, analysis of their level of risk, and ranking of priority hazards by level of risk.

Purpose of the STAR

- To help countries to **identify, assess and prioritize health risks**, to inform **public health emergency planning** to strengthen country capacity to prevent, mitigate, early detect, rapidly respond to, and recover from public health emergencies (all-hazards).

Objectives of the STAR

- Provide a **systematic, transparent and evidence-based approach** to identify risk, analyse and evaluate the risk level
- Identify relevant **hazards** and their **health consequences**, analyse population **exposure and vulnerability** and identify existing **coping capacities** and **challenges**
- Inform the **development or updating of plans** based on risk assessment (National Emergency Response Plan (NERP) and hazard-specific contingency plans)
- Prioritisation of limited resources for the implementation of **risk mitigation, operational readiness and preparedness** activities toward imminent public health risks

Hazard Risk Matrix – 2022 – NATIONAL

<i>Impact</i>	Critical					
	Severe	Influenza A - emergence of novel strain; Nuclear agents		Civil unrest	Flood; Storm	
	Moderate	Zika virus; Ebola virus disease, Marburg, Lassa fever, Lujo; Yellow fever	Plague; Chemical agents	Typhoid fever; Cyber attack	Fires; Cholera	COVID-19 - emergence of new VOC; Transportation accidents
	Minor		Listeriosis; Rift Valley fever	Heat wave; Cold wave/Severe winter	Infrastructure Disruption (power outages, water supply)	Violence
	Negligible	Anthrax - (intentional i.e., biological warfare)		Mudflow; Drought; Rabies; Monkeypox		
		Very unlikely	Unlikely	Probable	Very likely	Almost sure
		<i>Likelihood</i>				

- The STAR Risk matrix ranks risk visually on a 5 X 5 table, describing the likelihood and impact of each hazard assessed within the STAR workshop
- 27 hazards were identified during the STAR workshop
- Of these, 7 hazards are prioritised as high risk (amber) and 4 hazards are prioritised as moderate risk (yellow)
- The high & moderate risks (11) will be prioritized for the development of contingency plans

Risk calendar for seasonal hazards – National 2022

- The risk calendar provides the mapping of the seasonality of hazards to support planning, prioritization and implementation of timely and appropriate actions to mitigate risk, scale-up readiness capabilities, and be ready to respond.
- 11 hazards were identified to be seasonal (the remaining 16 are non-seasonal)
- The calendar is based on the consensus of the STAR participants
- Red indicates the point in time when the hazard is most likely to occur, and green when the hazard is least likely to occur

Hazard	Risk level	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Flood	High												
Storm	High												
Fires	High												
COVID-19 new variant of concern	High												
Cholera	High												
Transport accidents	High												
Typhoid fever	Moderate												
Heat wave	Low												
Cold wave	Low												
Influenza A – novel strain emergence	Low												
Rift Valley fever	Low												

Lowest

Moderate

High

Peak

PHEOC operationalization in SA (insights, knowledge sharing, Lessons learned, and recommendations to SA/ NDoH)



Source: PHEOC Training Material WHO AFRO

BACKGROUND TO THE PHEOC ESTABLISHMENT IN SA

- **IHR internationally binding legal instrument** which requires countries to build the capabilities to detect, assess, report, and respond to public health events. One such capacity is Health Emergency Management a vital feature of which is a PHEOC
- South Africa has been facing **multiple and concurrent emergencies in recent years**. These include floods, ongoing drought, water shortages, load shedding, communicable disease outbreaks including COVID19, cholera and others that keep impacting on the lives and livelihood of the population with severe health consequences and disrupted health service delivery.
- The **establishment of a network of PHEOC in the country will allow for the integration** of traditional public health services into an emergency management model for prompt response to public health threats and emergencies.
- This initiative has been **endorsed by the National Department of Health** and is being supported by WHO-AFRO

WHAT IS A PUBLIC HEALTH EMERGENCY OPERATION CENTRE

- PHEOC is an emergency operations centre that specializes in the command, control, and coordination to emergencies that involve health consequences and Public Health threats
- Strives to achieve a goal-oriented response to Public Health Emergencies and unifies effort among response agencies



WHO Regional
Office for Africa
SHOC room,

PURPOSE OF A PUBLIC HEALTH EMERGENCY OPERATION CENTRE

- Timely, event-specific operational decision-making using the best available information, policy, technical advice and plan
- Communication, Collaboration & Coordination with response stakeholders from a centralized location
- Collection Collation Analysis & presentation of event Data & information to support Response Planning & Documentation
- Acquisition & Deployment of response Resources including surge capacity & services & material support to the EOC itself & to all response Personnel
- Monitoring financial commitment and providing administrative services for the EOC functions

WHY DOES SOUTH AFRICA NEED A PHEOC?

COUNTRY EVALUATION TOOL

PREVENT		7
P1. LEGAL INSTRUMENTS		7
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P3. IHR COORDINATION, NATIONAL IHR FOCAL POINT.....		16
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JEE, 3rd Ed.

PHEOC

Corresponding JEE indicators

R1.1

Emergency risk assessment & readiness

R1.2

Public health emergency operations centre (PHEOC)

R1.3

Management of health emergency response

R1.4

Activation & coord. Of health personnel & teams in a PHE

R1.5

Emergency logistic & supply chain management

R1.6

Research development & innovation

ESSENTIAL STEPS IN ESTABLISHING A PHEOC

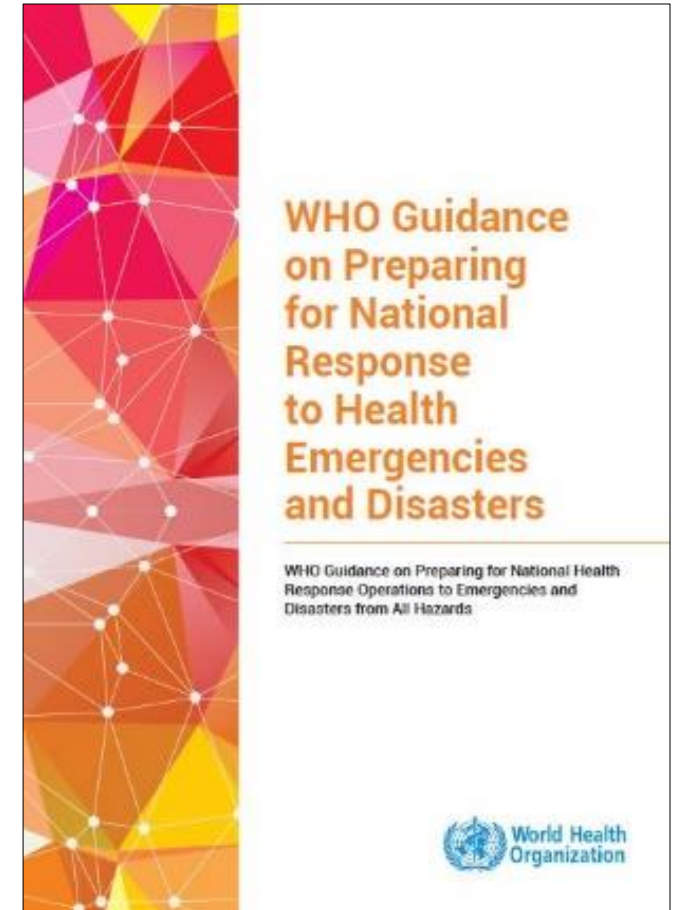
❑ KEY STEPS INCLUDES

- Establishing legal authority and planning guidance
- Forming an effective steering committee
- Establishing main objectives
- Establish a policy group
- Defining the PHEOC's essential functions
- Develop PHEOC core components

NHEROP

(NHEROP) for all hazards

- **NHEROP - National Health Emergency Response Operations Plan.** It is a strategic and operational framework to guide countries in preparing for and responding to health emergencies and disasters across all hazards.
- All hazards, multi sectoral, whole-of-society, community centered approach
- Uses existing capacities of sectors, systems and communities
- links the national response actions to subnational and local response actions, including those of communities as the first responders
- Establishes and strengthens national coordination mechanisms for health emergency response
- Is aligned to and coordinated with any other sectoral emergency response plans
- Defines the overall roles, responsibilities, systems and mechanisms for initiating and managing emergency response
- Guidance describes the process, timeline, template



Contingency Planning



Contingency planning

Introduction

- Contingency planning is part of a cycle in which the identification and regular monitoring of risks, vulnerabilities and capacities informs the planning and implementation of measures to mitigate the risks and prepare to respond

Contingency planning goal

- To address and prepare for each hazard with imminent or high risks for the health of people (as identified by the strategic risk analysis)

Contingency planning results

- List and organise all risk mitigation and preparedness measures needed to address the given risks
- Clearly define roles and responsibilities for the implementation of each planned action

Risk mitigation actions

- Include all actions to reduce the severity of, probability of occurrence of, or exposure to a given hazard and therefore lessen its impact
- Preemptive vaccination
- Vector control
- Improved water, hygiene, and sanitation measures
- Infection control including personal protection
- Risk communication

Preparedness actions

- Include all actions to increase knowledge and capacity to anticipate, respond to and recover from the impact of one or more events
- Ensure an early warning system is in place
- Position drugs, vaccines, medical supplies and other logistic items
- Identify potential treatment centers (isolation rooms), train staff and ensure case management protocols are in place
- Organize training and simulation exercise of the potential response



Thank You