

FEDERAL REPUBLIC OF NIGERIA

COUNTRY-LED MIDTERM

# JOINT EXTERNAL EVALUATION OF IHR CORE CAPACITIES

**REPORT: NOVEMBER 18 – 22, 2019** 







PREVENT

41%



#### Country-led Midterm Joint External Evaluation of IHR Core Capacities

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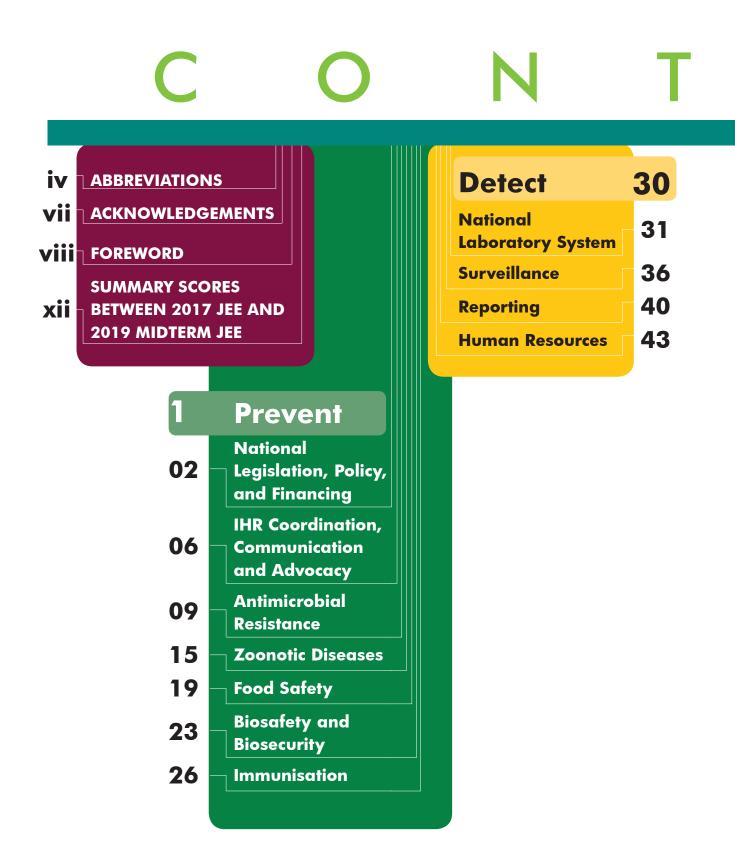
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other ihr hazards 43%

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# ABBREVIATIONS

AAR	After-action reviews
	Avian Influenza
	Antimicrobial Resistance
	AMR Coordinating Committee
	AMR Technical Working Group
	Animal Resources Information System
	Artisanal and Small Scale Gold Mining
	Basic Health Care Provision Fund
CAS	Central Alarm Station
CCEOP	Cold Chain Equipment Optimization Plan
CEF	Community Engagement Framework
CHIPS	Community Health Influencers, Promoters, and Services
CME	Continuous Medical Education
CSM	Cerebrospinal Meningitis
EBS	Event-based Surveillance
EMT	Emergency Management Teams
EPI	Expanded Programme on Immunisation
EQA	External Quality Assurance
FETP	Field Epidemiologists Training Programme
FMARD	Federal Ministry of Agriculture and Rural Development
FMoH	Federal Ministry of Health
GIS	Geographic Information System
GLASS	Global Antimicrobial Resistance Surveillance System
IBS	Indicator-based Surveillance
ICC	Interagency Coordination Committee
IDSR	Integrated Disease Surveillance and Response
IHR	International Health Regulations
IHR TWG	IHR Technical Working Group
INFOSAN	International Food Safety Authorities Network

IPC	Infection, Prevention, and Control
ITSON	Integrated Training of Surveillance Officers in Nigeria
JEE	Joint External Evaluation
LGA	Local Government Area
MAKIA	Mallam Aminu Kano International Airport
MCV	Measles Containing Vaccine
MCV2	Measles Containing Vaccine 2nd dose
MDA	Ministries, Departments, and Agencies
MLSCN	Medical Laboratory Science Council of Nigeria
MMIA	Murtala Mohammed International Airport
MoU	Memorandum of Understanding
NADIS	National Animal Disease Information Service
NAFDAC	National Agency for Food and Drug Administration and Control
NAIA	Nnamdi Azikwe International Airport
NAP	National Action Plan
NAPHS	National Action Plan on Health Security
NCDC	Nigeria Centre for Disease Control
NCH	National Council on Health
NDHS	National Demographic Health Survey
NEMA	National Emergency Management Agencies
NERICC	National Emergency Routine Immunisation Coordination Centre
NFP	National Focal Point
NFSMC	National Food Safety Management Committee
NNRA	Nigerian Nuclear Regulatory Authority
NNREP	National Nuclear and Radiological Emergency Plan
NPFSIS	National Policy on Food Safety and Implementation Strategy
NPHCDA	National Primary Health Care Development Agency
NRL	National Reference Laboratory
NSIPSS	Nigeria Strategy on Immunisation and Primary Health Care Systems Strengthening

V COUNTRY-LED MIDTERM JOINT EXTERNAL EVALUATION OF IHR CORE CAPACITIES

NVRI	National Veterinary Research Institute
ODK	Open Data Kit
OIE	World Organisation for Animal Health
ONSA	Office of National Security Adviser
РНС	Primary Healthcare
PHECP	Public Health Emergency Contingency Plans
PHEIC	Public Health Emergency of International Concern
PHEOC	Public Health Emergency Operation Centre
PHS	Port Health Services
ΡοΕ	Points of Entry
REDISSE	Regional Disease Surveillance Systems Enhancement
REDISSE-CERC	Regional Disease Surveillance Systems Enhancement Contingent Emergency Response Component
RI	Routine Immunisation
RKI	Robert Koch Institute
RSSH	Resilient and Sustainable Systems for Health
SAICM	Strategic Approach for International Chemicals Management
SimEx	Simulation Exercise
SMOH	State Ministry of Health
SOP	Standard Operation Procedures
SORMAS	Surveillance, Outbreak Response Management, and Analysis System
TAT	Turn-around-time
TDS	Total Diet Study
ΤΝΟ	Turn Nigeria Orange
TOR	Terms of Reference
WHA	World Health Assembly
WHO	World Health Organization
WUENIC	WHO/UNICEF Estimates of National Immunisation Coverage

# **ACKNOWLEDGEMENTS**

The Mission Team for Nigeria's Midterm Joint External Evaluation (JEE) would like to acknowledge the following, whose support and commitment to the principles of the International Health Regulations (2005) have ensured a successful outcome to this midterm JEE mission.

- The Government and national experts of Nigeria for their support of, and work in, preparing for the midterm JEE mission
- The Governments of the United Kingdom, and the United States of America, for providing technical experts for this country-led review process
- The Food and Agriculture Organization of the United Nations (FAO), the World Organisation for Animal Health (OIE), the West Africa Health Organization (WAHO), Resolve To Save Lives (RTSL), World Bank, Georgetown University, Public Health England (PHE), US Centres for Disease Control and Prevention (US-CDC), Pro-Health International (PHI), Africa Field Epidemiology Network (AFENET), and University of Maryland, Baltimore (UMB) for their contribution of expertise
- WHO Country Office for technical, planning and financial support
- We appreciate the financial support provided by Resolve To Save Lives and Public Health England for this activity



Nigeria is a signatory to the International Health Regulations (IHR 2005) and mandated to report on IHR compliance status at the World Health Assembly (WHA) on an annual basis. In June 2017, Nigeria conducted her Joint External Evaluation (JEE) joining a list of countries that have voluntarily agreed to participate in the transparent, peer-led process to assess compliance with the IHR core capacities to prevent, detect and respond to threats of public health significance. Nigeria should be commended for volunteering to conduct a country-led midterm Joint External Evaluation (JEE) following the 2017 JEE. This demonstrates strong commitment, foresight, leadership, and confidence in the process on the part of the government. The national team should also be congratulated for convening a large number of participants including key program managers and technical experts, from a variety of organisations and departments, to contribute to the self-assessment, as well as the external evaluation. Their contributions greatly enriched the preparation and delivery of the JEE mission. Based on the findings of the mission and the recommended priority actions for each of the 19 technical areas, various priority actions/focus areas were identified based on the WHO benchmarks tool for IHR. These will inform relevant actions to be taken in 2020 and will align with the existing National Action Plan for Health Security Strategy document and other existing programs such as the World Bankfunded Regional Disease Surveillance Systems Enhancement (REDISSE) project.

The midterm assessment was conducted between November 18 and 22, 2019. The new JEE tool (2nd edition) was used for this process followed by the identification of benchmark actions that will be implemented in 2020 (detailed in the 2020 implementation plan). Furthermore, anticipated resource needs were mapped for progress made to be sustained to ensure Nigeria fulfils the IHR core capacity requirements.

Following the assessment, 11 (of 19) technical areas recorded verifiable increases in the scoring of indicators compared to the 2017 JEE. Though they are yet to attain the highest level scoring of 5. These include National Legislation, Policy, and Financing, Zoonotic Disease, Biosafety and Biosecurity, National Laboratory System, Reporting, Emergency Preparedness, Emergency Response Operations, Linking Public Health and Security Agencies, Medical Counter Measures, Risk Communication and Points of Entry. FOREWORD



Five technical areas remained on the same scoring as in 2017. These include IHR Coordination, Communication and Advocacy, Antimicrobial Resistance, Surveillance, Chemical Events, and Radiation Emergencies while three technical areas; Food Safety, Immunisation, and Human Resources decreased in their scoring.

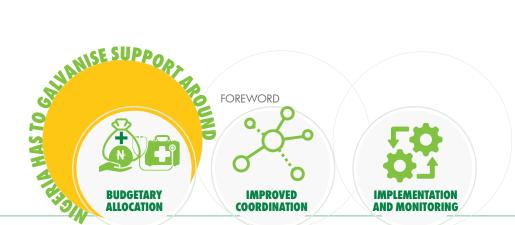
Identified areas with critical needs include National Legislation, Policy and Financing, IHR Coordination, Communication, and Advocacy, Food Safety, Chemical Events, Biosafety and Biosecurity and Preparedness. This is based on the current scoring and largely on the fact that no change has been recorded in the JEE scores since 2017 as well as the launch of the National Action Plan on Health Security (NAPHS).

Some Identified successes in the implementation of the NAPHS include:

- Enabling Environment for IHR Implementation: passage of Nigeria Centre for Disease Control (NCDC) Bill and assent by the President of the Federal Republic of Nigeria, establishment of a functional IHR National Focal Point (NFP); desk review of relevant IHR related laws across ministries, departments and agencies (MDAs)
- Establishment of State Public Health Emergency Operation Centres (PHEOCs): enhancing the EOC/Incident Management System at the federal and state level and strengthening sub-national Rapid Response Teams (RRT)
- Designation of points of entry (PoE) and capacity building: three international airports and one seaport designated with requisite capacities of staff across the various points of entry
- One Health coordination: establishment of a multi-sectoral mechanism at national level
- **Laboratory capacity:** increased testing capacity of priority diseases (e.g. Lassa fever, yellow fever, and Monkeypox) and implementation of an efficient biological sample transfer mechanism from states to the NCDC National Reference Laboratory

Challenges encountered through the implementation of NAPHS include:

• **Poor coordination between MDAs implementing IHR activities:** e.g. Agriculture, Environment and Health with no clear understanding of responsibilities on the country's implementation of IHR core capacities



- **Insufficient funding:** funds to fully implement prioritised activities in NAPHS often not available and insufficient (outside external funding sources) for relevant MDAs
- Lack of formal communication/coordination within MDAs: Inconsistent attendance/representation of focal persons at various IHR-related activities resulting in a lack of understanding of responsibilities and delayed implementation of planned activities
- **Too many prioritised, non-integrated activities:** numerous (often ambitious) activities prioritised to be implemented by various MDAs with each activity not entirely included in the annual work plans of MDAs and often with no budget

Best practices for emulation include:

- **Strong partnerships:** Cross-sectoral engagement (One Health), partner organisations, civil society, and key MDAs collaboration improves planning and implementation of key activities
- Surveillance enhancement: implementation of event-based surveillance (EBS), mobile Strengthening Epidemic Response Systems (mSERS); Surveillance, Outbreak Response Management, and Analysis System (SORMAS); domestication of IDSR guidelines, and development of the framework for Integrated Training of Surveillance Officers in Nigeria (ITSON)
- WHO benchmarks tool: allowed for identifying the 'next step' to make progress in priority areas
- **Resource mapping:** Identified resources for IHR implementation and areas for collaboration
- Incorporation of feedback from After-action Reviews (AAR): feedback received during AAR (e.g. Lassa fever, cerebrospinal meningitis (CSM), monkeypox) for informed priority actions across relevant technical areas

To sustain the gains recorded, Nigeria has to galvanise support around three main crosscutting areas;

#### Budgetary allocation

- Increased domestic budget allocation, release, and tracking
- $\circ$  Harness resources in the Regional Disease Surveillance Systems Enhancement

FOREWORD

(REDISSE) project (across MDAs)

#### Improved coordination

- Implementation of activities in the technical areas require leadership from the highest level
- MDAs need to work closely with the IHR NFP (NCDC)
  now legally defined after JEE in 2017
- Dedicated staff to prioritise activities identified in the NAPHS for and in each MDA

#### • Implementation and monitoring

 Honourable Ministers should request IHR/NAPHS implementation updates across MDAs in Health, Agriculture, and Environment on a frequent basis

**Overall, the ReadyScore<sup>1</sup> for Nigeria increased from 39%** to 46% – an increase of 7%. The main challenges identified with NAPHS implementation include; weak coordination across MDAs, inadequate finance, poor reporting and update of the implementation status of planned activities on the NAPHS tracker, too many prioritised activities for 2018/19 and limited understanding of roles of IHR participating MDAs in the implementation of activities prioritized in the NAPHS.

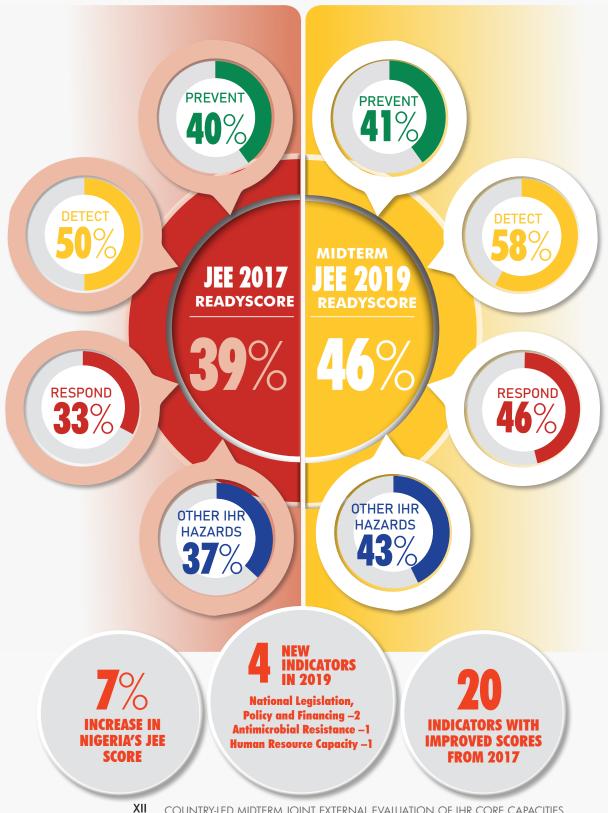
The NCDC commits to improving capacities in the following priority technical areas - **IHR Coordination, Human Resources, and Zoonotic Diseases** going forward while ensuring prioritised benchmarks across all technical areas are fully incorporated in the 2020 NAPHS implementation plan and tracked.





<sup>1</sup> PreventEpidemics.org

# Summary of Scores between 2017 JEE and 2019 Midterm JEE



COUNTRY-LED MIDTERM JOINT EXTERNAL EVALUATION OF IHR CORE CAPACITIES

TECHNICAL AREA	INDICATOR		SELF-AS- SESSED SCORE (2019)	CHANGE
PREVENT				
National Legislation, Policy and Financing	P1.1 The State has assessed, adjusted and aligned its domestic legislation, policies and administrative arrangements in all relevant sectors, to enable compliance with the IHR (Combines P1.1 and P1.2 from JEE v1)	1	2	↑
	P1.2 Financing is available for the implementation of IHR capacities (New indicator in JEE v2)		2	New
	P1.3 A financing mechanism and funds are available for timely response to public health emergencies ( <i>New indicator in JEE v2</i> )		2	New
IHR Coordination, Communication and Advocacy	P2.1 A functional mechanism established for the coordination and integration of relevant sectors in the implementation of IHR	2	2	$\leftrightarrow$
Antimicrobial Resistance	P3.1 Effective multi-sectoral coordination on AMR (New indicator in JEE v2)		4	New
	P3.2 Surveillance of AMR (Indicator combines P3.1 and P3.2 from JEE v2)	2	2	$\leftrightarrow$
	P3.3 Infection prevention and control	2	1	$\checkmark$
	P3.4 Optimise use of antimicrobial medicines in human and animal health and agriculture	2	1	$\checkmark$
Zoonotic Disease	P4.1 Coordinated surveillance systems in place in the animal health and public health sectors for zoonotic diseases/pathogens identified as joint priorities	2	3	↑
	P4.2 Mechanisms for responding to infectious and potential zoonotic diseases established and functional (Previously P4.3)	1	3	↑
Food Safety	P5.1 Surveillance systems in place for the detection and monitoring of foodborne diseases and food contamination	2	1	$\checkmark$
	P5.2 Mechanisms are established and functioning for the response and management of food safety emergencies	2	1	$\checkmark$
Biosafety and Biosecurity	P6.1 Whole-of-government biosafety and biosecurity system is in place for all sectors (including human, animal and agriculture facilities)	1	2	↑
	P6.2 Biosafety and biosecurity training and practices in all relevant sectors (including human, animal, and agriculture)	1	1	$\leftrightarrow$
Immunisation	P7.1 Vaccine coverage (measles) as part of national programme	3	2	$\checkmark$
	P7.2 National vaccine access and delivery	4	4	$\leftrightarrow$

XIII COUNTRY-LED MIDTERM JOINT EXTERNAL EVALUATION OF IHR CORE CAPACITIES

TECHNICAL AREA	INDICATOR		SELF-AS- SESSED SCORE (2019)	CHANGE
DETECT				
National Laboratory	D1.1 Laboratory testing for detection of priority diseases	3	4	↑
System	D1.2 Specimen referral and transport system	1	2	$\uparrow$
	D1.3 Effective national diagnostic network	2	3	$\uparrow$
	D1.4 Laboratory quality system	2	2	$\leftrightarrow$
Surveillance	D2.1 Surveillance systems (Combines D2.1 and D2.4 of JEE v1)	3	2	$\checkmark$
	D2.2 Use of electronic tools	2	3	1
	D2.3 Analysis of surveillance data	3	3	$\leftrightarrow$
Reporting	D3.1 System for efficient reporting to FAO, OIE, and WHO	3	4	↑
	D3.2 Reporting network and protocols in-country	2	3	↑
Human Resources (animal and human health	D4.1 An up-to-date multi-sectoral workforce strategy in place (previously D4.3)	2	2	$\leftrightarrow$
sectors)	D4.2 Human resources are available to effectively implement IHR (previously D4.1)	3	3	$\leftrightarrow$
	D4.3 In-service trainings are available (New indicator in JEE v2)		3	New
	D4.4 FETP or other applied epidemiology training programme is in place ( <i>previously D4.2</i> )	4	3	$\checkmark$
RESPOND				
Emergency Preparedness	R1.1 Strategy emergency risk assessments conducted and emergency resources identified and mapped	1	2	↑
	R1.2 National multisectoral multihazard emergency preparedness measures, including emergency response plans, are developed, implemented, and tested	1	1	$\leftrightarrow$
Emergency Response Operations	R2.1 Emergency response coordination (New indicator in JEE v2)	2	3	↑
Operations	R2.2 EOC capacities, procedures and plans (Combines R2.1 and R2.2 from JEE v1)	2	3	↑
	R2.3 Emergency exercise management programme	3	4	↑
Linking Public Health and Security Authorities	R3.1 Public health and security authorities *e.g. law enforcement, border control, customs) are linked during a suspect or confirmed biological event *Criteria for level 4 became more stringent with revised JEE tool	1	2	↑

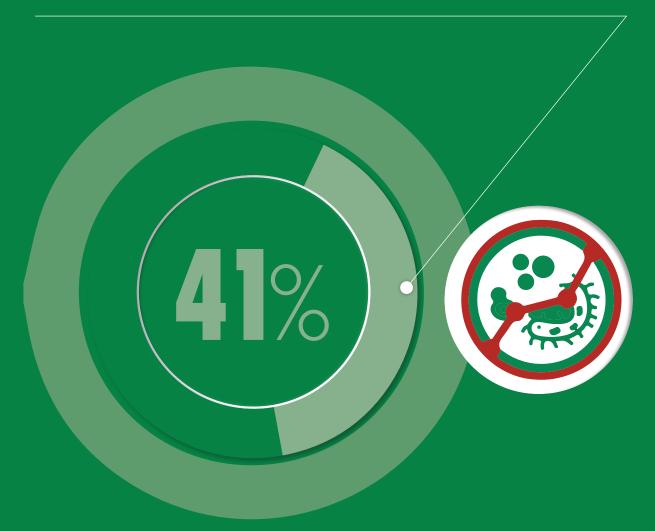
TECHNICAL AREA	INDICATOR	JEE SCORE (2017)	SELF-AS- SESSED SCORE (2019)	CHANGE
RESPOND				
Medical Countermeasures and Personnel Deployment	R4.1 System in place for activating and coordinating medical countermeasures during a public health emergency	1	2	↑
Deployment	R4.2 System in place for activating and coordinating health personnel during a public health emergency	1	1	$\leftrightarrow$
	R4.3 Case management procedures implemented for IHR relevant hazards (R2.4 from JEE v1)	2	2	$\leftrightarrow$
Risk Communications	R5.1 Risk communication systems for unusual/ unexpected events and emergencies	1	2	↑
	R5.2 Internal and partner coordination for emergency risk communication	3	3	$\leftrightarrow$
	R5.3 Public communication for emergencies	2	3	↑
	R5.4 Communication engagement with affected communities	3	3	$\leftrightarrow$
	R5.5 Addressing perceptions, risky behaviours and, misinformation	3	4	↑
IHR-RELATED HA	ZARDS AND POINTS OF ENTRY			
Points of Entry	PoE.1 Routine capacities established at points of entry	1	3	↑
	PoE.2 Effective public health response at points of entry	1	1	$\leftrightarrow$
Chemical Events	CE.1 Mechanisms established and functioning for detecting and responding to chemical events or emergencies	1	1	$\leftrightarrow$
	CE.2 Enabling environment in place for the management of chemical events	2	2	$\leftrightarrow$
Radiation Emergencies	RE.1 Mechanisms established and functioning for detecting and responding to radiological and nuclear emergencies	3	3	$\leftrightarrow$
	RE.2 Enabling environment in place for the management of radiological and nuclear emergencies	3	3	$\leftrightarrow$







# PREVENT



# 1.1 National Legislation, Policy and Financing

#### 1.1.1 Background

The International Health Regulations (IHR) (2005) provide obligations and rights for States Parties. In some States 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 in order to facilitate IHR implementation and maintenance. Implementing legislation could serve to institutionalise 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 at http://www.who.int/ihr/legal\_issues/legislation/ en/index.html. In addition, policies that identify national structures and responsibilities, as well as the allocation of adequate financial resources are also important. Nigeria is working towards ensuring that adequate statutory and administrative provisions for the implementation of IHR are in place across Ministries, Departments, and Agencies (MDAs) by 2020. Priority actions identified in the 2017 JEE were followed through by the relevant agencies with support from various development partners. This reflects in the slight improvement in scoring across the indicators. However, across the MDAs, there needs to be convening for reorientation on IHR and its relevance across each of the concerned MDAs. Furthermore, each MDA needs to have a clear and concise implementation plan with designated technical officers responsible and aware of the existing policies that are in place as against just the legal advisers in each MDA. This awareness will enhance the implementation of the regulations, laws and or polices and clarifications sought where required. It is also anticipated that through such convening, personnel from the animal health sector will be fully engaged to ensure existing laws are robust enough to cover both animal and human health in-line with a One Health approach.

Across the MDAs, there needs to be convening for reorientation on IHR and its relevance across each of the concerned MDAs



#### **1.1.2 JEE and Mid-JEE Indicators**

NATIONAL LEGISLATION, POLICY AND FINANCING						
JEE Score 2017 (Original JEE Tool)		JEE Score 2019 (JEE 2.0 Tool)				
P.1.1 Legislation, laws, regulations, administrative requirements, or other government policies in place are sufficient for implementation of IHR (2005)	1	P1.1 The State has assessed, adjusted and aligned its domestic legislation, policies and administrative arrangements in all relevant sectors, to enable compliance with the IHR	2			
P.1.2 The State can demonstrate that it has adjusted and aligned its domestic legislation,policies and administrative arrangements to enable compliance with IHR (2005 <b>)</b>		P1.2 Financing is available for the implementation of IHR capacities (New)	2			
		P1.3 A financing mechanism and funds are available for timely response to public health emergencies ( <i>New</i> )	2			

Following the revision of the JEE tool, two new indicators were added to this technical area (P1.2 and P1.3). These indicators address the financing component in this technical area. P1.1 and P1.2 were merged.

#### 1.1.3 Rationale for 2019 Score

- a. Legislation
  - The Nigeria Centre for Disease Control (NCDC) Act 2018 was passed which designates NCDC as the IHR National Focal Point (NFP)
  - ii. Multi-sectoral review and assent of a legislative analysis of all instruments required for the implementation of IHR laws at the national level were conducted in November 2019. Areas which require adjustments and reviews have been identified, but the implementation of the recommendations are yet to commence
- b. Financing for IHR
  - Financing is available for the implementation of IHR core capacities through budgetary allocation to implementing MDAs. No specific IHR budget line exists. However, substantial external financing has been identified through formal resource mapping process conducted



MECHANISMS FOR EMERGENCIES - REDISSE-CERC & BHCPF -HAVE PROVIDED EXTRA-BUDGETARY FUNDING FOR HEALTH EMERGENCIES



in July 2019 and also in the Regional Disease Surveillance Systems Enhancement (REDISSE) project work plan

#### c. Emergency Financing

- i. An emergency public financing exists through the Regional Disease Surveillance Systems Enhancement Contingent Emergency Response Component (REDISSE-CERC), from the World Bank, which deploys emergency funds for IHR over the next five years (2019-2023). This emergency fund was used during NCDC's response to the Lassa fever outbreak in 2018
- ii. There is no other government public health emergency funding mechanism. However, through the National Health Act (2014) section 11, an emergency fund exists (emergency gateway) through the Basic Healthcare Provision Fund<sup>2</sup> (BHCPF). Despite this, the mechanism to rapidly release funds during emergencies does not exist

# 1.1.4 Implementation Progress Since JEE (2017)

- Passage of the Act establishing the Nigeria Centre for Disease Control (2018) by the President of the Federal Republic of Nigeria in 2018, as a statutory government agency with the mandate for communicable disease control
- b. Designation of NCDC as the National Focal Point for IHR
- c. Multi-sectoral review of legal instruments required for IHR implementation at the federal level
- d. New funding mechanisms for emergencies REDISSE–CERC and BHCPF. These have provided extrabudgetary funding for health emergencies

# **1.1.5 Implementation Challenges**

a. The mechanism for rapid access to new government emergency funding mechanism for use during public health emergencies does not exist



<sup>2</sup> Basic Health Care Provision Fund (BHCPF) aims to extend Primary Health Care (PHC) to all Nigerians by substantially increasing the level of financial resources to PHC services. The Act establishing the BHCPF provides that at least 1% of the federal consolidated revenue should be allocated to BHCPF Funding. Funds are supposed to be disbursed via three gateways – NHIS, NPHCDA and Emergency gateways.



- Inability to complete legislative action on the Public Health Bill (2013) and review of the National Health Act to reflect NCDC's status as the IHR NFP
- c. Inadequate technical and financial support to develop advocacy brief for increased funding for IHR technical areas

#### 1.1.6 Selected Benchmarks and Priority Actions for 2020 NAPHS Implementation

- a. Develop or adjust the laws, regulations, and policy for IHR implementation as well as mechanisms for its implementation
- b. Allocate budget at national and sub-national levels for the implementation of IHR capacities
- c. Implement and review the use of available financing and its effectiveness

### **1.1.7 Relevant Documentation**

- Act establishing the Nigeria Centre for Disease Control (2018)
- National Health Act 2014, Federal Ministry of Health
- Federal Ministry of Finance, SERCOM Charter, Pg. 27-28
- Federal Government of Nigeria, GIFMIS- AIE Manual/Lines, 2012-2016 budgets
- Ukwuije N.F (2017) Institutional Arrangement for Health Financing Reforms: Recommendation for States (2017)
- National Health Accounts (NHA) 2018-2019: Key findings and Policy Implication
- International Health Regulations (WHO) 2015
- Draft review of the Nigeria Public Health (Quarantine, Isolation and Emergency Health Matters Procedure) law.

DEVELOP OR ADJUST LAWS, REGULATIONS, AND POLICY FOR IHR

NO

OF IHR CAPACITIES

# 1.2 IHR Coordination, Communication and Advocacy

#### 1.2.1 Background

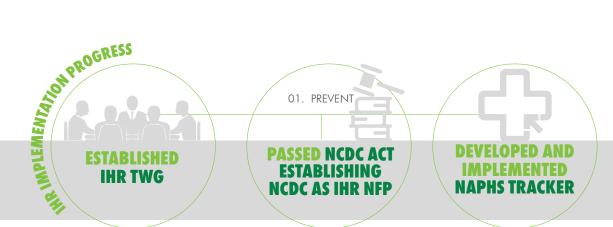
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The effective implementation of the IHR requires multi-sectoral/ multi-disciplinary approaches through national partnerships for efficient alert and response systems. Coordination of nationwide resources, including the designation of the IHR National Focal Point (NFP), and adequate resources for IHR implementation and communication, is a key requisite for a functioning IHR mechanism at the country level.

Nigeria will continue to strengthen her IHR NFP for effective coordination, communication, and advocacy for IHR implementation. There will be the establishment of an information exchange system for the parties involved in IHR, using modern electronic communications, as well as a quarterly stakeholder meeting (through the IHR Technical working group). With additional funds, further activities to integrate human, animal, and food sectors will be initiated.

Scoring in this technical area as contained in the updated JEE 2nd Edition tool reflects the need to have SOPs (for coordination and communication) between and within relevant MDAs. For the country to score 3, these SOPs need to be available and implemented within and between all participating MDAs. While the country made some gains as listed below (see implementation progress since JEE 2017), these were not sufficient to justify an increase in scoring. Therefore, it is imperative that SOPs are developed and implanted for effective coordination and communication within and between MDAs, WHO, NFP and nongovernmental agencies. When this is developed, there needs to be a systematic review of such SOPs to accommodate changes as they occur. In addition, the list of stakeholders needs to be updated regularly. This will foster easier communication and ensures collective learning to and from the IHR NFP (NCDC). The country has conducted after-action reviews (AARs) following robust responses to outbreaks – Lassa fever, CSM, monkeypox since the last JEE in 2017. As part of coordination activities, recommendations from the AARs need to be implemented and

There is a need to have SOPs (for coordination and communication) between and within relevant MDAs.



used to improve subsequent response activities. More importantly, these need to be documented. Where multi-sectoral collaborations are required to mount responses, such existing mechanisms for collaboration need to be regularly tested.

## **1.2.2 JEE and Mid-JEE Indicators**

IHR COORDINATION, COMMUNICATION AND ADVOCACY					
JEE Score 2017 (Original JEE Tool) JEE Score 2019 (JEE 2.0 Tool)					
P.2.1 A functional mechanism is established for the coordination and integration of relevant sectors in the implementation of IHR	2	P2.1 A functional mechanism established for the coordination and integration of relevant sectors in the implementation of IHR	2		

### 1.2.3 Rationale for 2019 Score

There is a coordinating mechanism in place within multi-sectoral governmental agencies. Standard Operation Procedures (SOP) and Terms of Reference (TOR) in place for effective communication across MDAs on events that may constitute public health event or risk of national concern.

### 1.2.4 Implementation Progress Since JEE (2017)

- a. Establishment of IHR Technical Working Group (IHR TWG)
- b. Passage of the NCDC Act establishing the NCDC as the IHR NFP
- Development and implementation of the National Action Plan for Health Security (NAPHS) tracker for monitoring and evaluation of prioritised activities in the NAPHS

### **1.2.5 Implementation Challenges**

7

- a. Non-existent SOP for enhanced coordination within and between different MDAs to IHR NFP
- b. One Health platform yet to be established at all levels

#### 1.2.6 Selected Benchmarks and Priority Actions for 2020 NAPHS Implementation

- a. Establish and implement SOP for coordination and communication within MDAs and between MDAs and NFP and training of IHR responsible officers in all MDAs on implementation of the SOP
- Develop a mechanism for ensuring lessons identified from AARs and simulation exercises (SimEx) are implemented to enhance the NFP and improve coordination mechanisms
- c. Operationalise the national One Health platform and extend to subnational levels

#### **1.2.7 Relevant Documentation**

- Act establishing the Nigeria Centre for Disease Control (2018)
- International Health Regulations (WHO) 2015
- IHR Core Capacity Monitoring Framework Questionnaire for monitoring progress in the implementation of IHR core capacities in states parties 2019
- Draft IHR TWG Standard Operation Procedure monitoring progress in the implementation of IHR core capacities in states parties 2019
- Draft IHR TWG Standard Operation Procedure



### **1.3 Antimicrobial Resistance**

#### 1.3.1 Background

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, this problem has become a crisis. Antimicrobial resistance 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.

Antimicrobial Resistance (AMR) has recently gained worldwide recognition as the World Health Assembly endorsed the global action plan to tackle AMR. In Nigeria, the Nigeria Centre for Disease Control is mandated to serve as the AMR Coordinating Body by the Honourable Minister of Health. The One Health AMR Technical Working Group was formally inaugurated and tasked to conduct a situation analysis and develop a National Action Plan for AMR (now completed). The TWG comprises key members representing animal health, food and animal production, human health and, the environment sector.

For indicator P3.1 it was collectively agreed by the country team and external evaluators to move to a score of 4 (from 3). This was due to the existence of a national action plan for AMR with an operational plan and also M&E indicators. However, additional fine details and specificity need to be provided for the operational plan. The animal health sector does not currently participate in External Quality Assurance (EQA) assessments. While Infection Prevention and Control (IPC) guidelines exist for human health, none exists for the animal health sector. In other to optimise the use of antimicrobial medicines in human and animal health, there is a need for the publication of documents addressing appropriate use, availability, and quality of antimicrobials. Furthermore, activities that focus on the environment need to be explicitly captured in the operational plans in line with a One Health approach.



In other to optimise the use of antimicrobial medicines in human and animal health, there is a need for the publication of documents addressing appropriate use, availability, and quality of antimicrobials.



#### **1.3.2 JEE and Mid-JEE Indicators**

ANTIMICROBIAL RESISTANCE					
JEE Score 2017 (Original JEE Tool)		JEE Score 2019 (JEE 2.0 Tool)			
P.3.1 Antimicrobial Resistance detection	2	P3.1 Effective multi-sectoral coordination on AMR (New)	4		
P.3.2 Surveillance of infections caused by antimicrobial-resistant	2	P3.2 Surveillance of AMR	2		
pathogens	4	P3.3 Infection Prevention and Control	1		
P.3.3 Health care-associated infection (HCAI) prevention and control programmes	2	P3.4 Optimise use of antimicrobial medicines in human and animal health and agriculture	1		
P.3.4 Antimicrobial stewardship activities	2				

P3.1 is a new indicator that was included in the JEE tool 2nd edition. Previous indicators P3.1 and P3.2 were merged. Lower scoring due to new requirements to fulfil scoring criteria in newly included indicators.

#### 1.3.3 Rationale for 2019 Score

a. Effective multi-sectoral coordination on AMR

National AMR Action Plan (NAP) has been developed for human health, animal food production, and environment sectors. The NAP is signed by the three Honourable Ministers in 2017 and presented at WHA. Multi-sectoral governance TORs have been developed, validation ongoing. AMR Coordinating Committee (AMRCC) coordinates regular meetings with the AMRTWG (at least three times a year). The meetings are funded partly by NCDC and partners. An operational plan and monitoring framework exists.

- b. Surveillance of AMR
  - NCDC National Reference Laboratory (NRL) and National Veterinary Research Institute (NVRI) Vom are the AMR National Reference Laboratory (NRL) for human and animal health respectively
  - ii. Nine human health and six animal health sentinel laboratories have been recently assessed by the AMRCC as part of AMR surveillance network; human health laboratories have commenced generation of data on six priority pathogens from blood cultures

01. PREVENT



– Staphylococcus aureus, Streptococcus pneumoniae, Klebsiella pneumoniae, Acinetobacter spp., E. coli and Pseudomonas aeuroginosa

- iii. Capacity and capability of laboratories on AMR surveillance are being built with support from partners
- iv. AMR surveillance data across human health laboratories is collected using WHONET software<sup>3</sup>, with reports routinely shared and collated with NCDC and subsequently reported to Global Antimicrobial Resistance Surveillance System (GLASS)<sup>4</sup>
- v. Collection, collation and reporting of animal health AMR surveillance leverages existing National Animal Disease Information Service (NADIS) surveillance structure
- c. Infection Prevention and Control
  - i. Development of National Infection Prevention and Control (IPC) guidelines
  - ii. Implementation of the 'Turn Nigeria Orange' (TNO) initiative to optimise 30 health facilities to become IPC centres of excellence. Focus is on increasing access to water, sanitation and hand hygiene
  - iii. Training on behavioural change to improve uptake of IPC measures (participatory approach) ongoing since 2017. Completed training in 15 (of 23) targeted hospitals with facilitators from NCDC, FMoH through support from Robert Koch Institute (RKI)
  - iv. Availability of biosecurity plan for Avian Influenza, African Swine fever implemented and are applied within the animal health AMR NRL and sentinel surveillance laboratories. The plan includes safe transportation of samples to the different identified laboratories for relevant tests
  - v. Review of the Animal Disease Control Act (2006) has commenced pending Presidential assent

<sup>4.</sup> Launched in October 2015, the Global Antimicrobial Resistance Surveillance System (GLASS) is being developed to support the global action plan on antimicrobial resistance. The aim is to support global surveillance and research in order to strengthen the evidence base on antimicrobial resistance (AMR) and help informing decision-making and drive national, regional, and global actions.



<sup>3.</sup> WHONET is a free Windows-based database software developed for the management and analysis of microbiology laboratory data with a special focus on the analysis of antimicrobial susceptibility test results

01. PREVENT



- d. Optimise use of antimicrobial medicines in human and animal health and agriculture
  - Retrieval of import data on current animal health sources of i. antimicrobial usage from the National Regulatory Authority (NRA), National Agency for Food and Drug Administration and Control (NAFDAC)
  - ii. Reporting of antimicrobial usage data to the World Organisation for Animal Health (OIE) global database using option 1<sup>5</sup>
  - iii. Four tertiary hospitals have commenced human health sentinel sites for the conduct of antimicrobial stewardship activities namely. These include; Lagos University Teaching Hospital; Obafemi Awolowo University Teaching Hospital, Ile Ife; National Hospital Abuja and University College Hospital, Ibadan
  - iv. Commencement of a national point prevalence survey on antibiotic use to be completed by January 17, 2020
  - v. The number of community pharmacies reporting data on antibiotic consumption (humans) increased from 71 to 123 over a two-year period (2017 to date) across Nigeria in a total of 23 states. These reports are received and reviewed by the AMRCC

# 1.3.4 Implementation Progress Since JEE (2017)

- Designation of three National Reference Laboratories and 15 sentinel a. laboratories for AMR surveillance for human and animal health
- b. Ongoing development of capacity strengthening plan for AMR surveillance laboratories
- c. Review of standard treatment guidelines and National Drug Policy with the inclusion of guides that reflect compliance with AMR guiding principles
- d. Routine reporting of antimicrobial use data in animal health to OIE
- Expansion of sites collecting and reporting antibiotic consumption e. data



One of the three 'Reporting Options' if quantitative data are available. The three reporting options represent increasing levels of detail of quantitative data on antimicrobial classes used in animals, with the possibility of separating amounts reported by type of use ("veterinary medical use," which includes use to treat, control, or prevent disease; and "non-veterinary medical use," which includes use for growth promotion), animal groups (terrestrial food-producing, aquatic food-producing, or companion) and routes of administration. Option 1 requires report on overall amount sold for/used in animals by antimicrobial class; with the possibility to separate by type of use



#### **1.3.5 Implementation Challenges**

- Delay in assent to the amended Animal Disease Control Act by the President of the Federal Republic of Nigeria. This is despite the Animal and Disease and Control Act (Repeal and Re-enactment) Bill, 2019 (H.B. 1268) being passed into law by the Senate on April 9, 2019
- b. Non-existence of specific regulation for Antimicrobial Stewardship in both human and animal health component
- c. Non-existence of surveillance protocols/guidelines in animal health
- d. Paucity of funds for implementation of AMR surveillance activities

# 1.3.6 Selected Benchmarks and Priority Actions for 2020 NAPHS Implementation

#### a. Human

- i. Implement national AMR surveillance strategy for External Quality Assurance (EQA), additional testing at the reference laboratory and capacity strengthening for reference and sentinel laboratories
- ii. Develop and support the implementation of national guidelines for antimicrobial stewardship at sentinel hospitals
- iii. Review and implement the national IPC policy and plan in both human and animal health sectors

#### b. Environment

- iv. Develop a national surveillance protocol for improving water, sanitation and environmental hygiene standards in Nigeria
- v. Implement validated waste management plan at designated sites

#### c. Animal

- vi. Develop and implement a national AMR surveillance protocol including all necessary as required in WHO Benchmark 2019
- vii. Develop and support the implementation of national guidelines for antimicrobial stewardship at sentinel farms and veterinary clinics
- viii. Develop and implement a national IPC/Biosecurity policy and plan for animal health

#### **1.3.7 Relevant Documentation**

- National Action Plan for Antimicrobial Resistance 2017-2022
- One Health AMR Governance Plan 2019
- National Laboratory Assessment Report Draft, 2017
- Guidelines for Programmatic Management of Drug-resistant Tuberculosis in Nigeria
- National Infection Prevention and Control Guideline
- Infection Control Policy and Activities for National TB and Leprosy Training Centre, Zaria, Nigeria
- Draft Animal Disease Control Act
- National Drug Policy

## **1.4 Zoonotic Diseases**

#### 1.4.1 Background

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.

The increase and expansion in the human population globally have significantly impacted on the interconnection of people, animals, and the environment by increasing the contact between humans and wild animal habitats. This ultimately increases the risk of exposure to new pathogens. Most emerging diseases in humans are zoonotic. It is likely that zoonotic diseases will continue to be threats to public health especially in areas where the human population is dense, and biodiversity is high, as in many parts of Nigeria. To detect, prevent and respond timely, improvement in animal disease surveillance system will require developing the list of national priority zoonotic diseases, building the technical capacities of the animal health workforce in surveillance and laboratory diagnosis with a multi-sectoral approach to coordinate the response of outbreaks of zoonotic diseases.

The country has demonstrated capacity for coordinated surveillance systems in both animal and public health sectors with the response to the 2015 avian influenza (AI) outbreak with adequate responses to events with the confirmation of spillover of zoonotic diseases to humans. Based on this, the scoring was revised upwards to 3 (from 2).



...improvement in animal disease surveillance system will require developing the list of national priority zoonotic diseases, building the technical capacities of the animal health workforce in surveillance and laboratory diagnosis with a multisectoral approach to coordinate the response of outbreaks of zoonotic diseases.



#### **1.4.2 JEE and Mid-JEE Indicators**

ZOONOTIC DISEASES						
JEE Score 2017 (Original JEE Tool)		JEE Score 2019 (JEE 2.0 Tool)				
P.4.1 Surveillance systems in place for priority zoonotic diseases/ pathogens	2	P4.1 Coordinated surveillance systems in place in the animal health and public health sectors for zoonotic diseases/pathogens identified as joint priorities	3			
P.4.2 Veterinary or animal health workforce	3	P4.2 Mechanisms for responding to infectious and potential zoonotic diseases established and				
P.4.3 Mechanisms for responding to infectious and potential zoonotic diseases are established and functional	1	functional	3			

In the revised version of the JEE tool, indicator P4.2 was moved to Human Resources.

#### 1.4.3 Rationale for 2019 Score

- a. A joint prioritised list of zoonotic diseases exists (last reviewed 2018)
- b. Surveillance system for zoonotic exists for both human (11 priority zoonotic diseases) and animal health (Rabies, TB, Brucellosis, Anthrax and Al) but yet to be integrated
- c. One Health Strategic Plan (2019 2023) as an operational plan is available for the coordination of response to zoonotic diseases events
- d. National Technical Working Groups for Lassa fever, monkeypox and yellow fever serve as coordinating platforms and play a key coordinating role in responding to these disease outbreaks
- e. Guidelines for the response to zoonosis are available and joint Rapid Response Team (RRT) training for human and animal health officers conducted

#### 1.4.4 Implementation Progress Since JEE (2017)

- a. Updated list of top priority zoonotic diseases through a 'One Health' deliberation process (last reviewed 2018)
- b. Developed One Health Strategic Plan (2019 2023)





- c. Supported the coordination mechanism in response to zoonotic disease outbreaks (Lassa fever, monkeypox and yellow fever)
- d. Conducted Evaluation of Performance of Veterinary Services (PVS)
- e. Development of Strategic Plans for additional Zoonosis Brucellosis and Anthrax (2019)
- f. Inauguration of Technical Work Group (TWG) by the Director, Department of Veterinary and Pest Control Services to develop a guideline for implementation of wildlife disease surveillance in Nigeria

#### **1.4.5 Implementation Challenges**

- a. Weak leadership commitment in the implementation of NAPHS activities by the relevant sectors
- b. Poor mutual accountability in funding and deployment of Human Resources
- c. Some of the identified NAPHS activities do not address the gaps in the JEE

### 1.4.6 Selected Benchmarks and Priority Actions for 2020 NAPHS Implementation

- Develop an electronic platform for surveillance and laboratory information sharing between relevant sectors (human, animal, and environment) including SOPs – formalise the process of surveillance information sharing between relevant sectors
- b. Train responsible staff for specific aspects of core surveillance activities, management and the operational plans of zoonotic diseases at national and sub-national levels – expand the scope of training to cover more zoonotic diseases
- c. Develop a system of surveillance for zoonosis in the wild animal in collaboration with Ministry of Environment
- d. Expand and disseminate One Health operational plan for both detection and response to all priority zoonotic diseases for the states and local government areas (LGAs)

#### **1.4.7 Relevant Documentation**

- Emergency preparedness and differentiated action plan for the surveillance and control of highly pathogenic avian influenza in Nigeria, September 2006
- Integrated National Avian and Pandemic Influenza Rresponse Plan, 2007–2009
- Rabies Elimination Guidelines, October 2016
- Livestock Population Estimate (2010-2016). Federal Department of Animal Husbandry Services
- FMARD, Federal Department of Livestock and NADIS. Veterinary-Epidemiology newsletter September 2019 Vol 11(2)
- OIE Annual Animal Health Report. Jan September 2019. Terrestrial and Aquatic
- One Health Strategic Plan 2019-2023
- Draft Joint Zoonotic Contingency Plan for Brucellosis and Anthrax 2019-2023
- Nigeria Performance of Veterinary Services (PVS) Gap Analysis Report 2019
- Joint Prioritised List of Zoonotic diseases

#### **1.5 Food Safety**

#### 1.5.1 Background

Food- and water-borne diarrhoeal diseases are leading causes of illness and death, particularly in less developed countries. The rapid globalisation 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 is 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.

The National Policy on Food Safety and Implementation Strategy (NPFSIS) was developed in 2014 to modernise the food safety system and structure in the country, reduce the incidence of foodborne diseases, and improve economic productivity. The National Food Safety Management Committee (NFSMC) was inaugurated to coordinate all food safety related programmes in the country. Further strengthening of these mechanisms will enhance food safety, detection, and response efforts. As already mentioned, the JEE 2nd Edition tool is more stringent and requires specific capacities to be met to attain a particular scoring. As such, scoring for indicator P5.1 was reduced to 1 (from 2). This is because, despite the existence of some form of mechanism, there was no evidence of the functionality of such a mechanism to respond and manage food safety emergencies. Efforts targeting some reported food-related outbreaks have been ad-hoc with plans to deepen relationships across relevant MDAs such as NCDC, NAFDAC, FMARD, and ensure full functionality of the National Food Safety Management Committee (NFSMC) and Inter-Ministerial Committee on Food Safety (IMCFS) as contained in the approved National Policy on Food Safety and Implementation Strategy.

Capacity and requisite manpower to collate and analyse routine surveillance data on foodborne diseases need to be built



Furthermore, food signals are to be escalated to the FMARD first for followup with necessary feedback communication loops created. With the existing Event-based Surveillance system (EBS) at the NCDC, this system should be leveraged to include search terms on food/food safety-related events. The food safety focal person should also be included in the EBS mailing list. Capacity and requisite manpower to collate and analyse routine surveillance data on foodborne diseases need to be built. Laboratory services need to be identified and utilised for laboratory confirmation of suspected cases. This could include existing laboratories at NAFDAC or identification of other standard and verified laboratories across the country.

A comprehensive risk assessment to help identify prioritise actions in the immediate, mid and long-term period needs to be carried out.

#### 1.5.2 JEE and Mid-JEE Indicators

FOOD SAFETY				
JEE Score 2017 (Original JEE Tool)		JEE Score 2019 (JEE 2.0 Tool)		
P.5.1 Mechanisms for multi-sectoral collaboration are established to ensure rapid response to food safety emergencies and outbreaks of foodborne diseases	2	P5.1 Surveillance systems in place for the detection and monitoring of foodborne diseases and food contamination	1	
ot toodborne diseases		P5.2 Mechanisms are established and functioning for the response and management of food safety emergencies	1	

A new indicator (P5.2) was added to this technical area. Though scoring may be lower compared to 2017, the requirements of the new tool are more stringent and assess functionality as against availability of coordination mechanisms or platforms for example.

#### 1.5.3 Rationale for 2019 Score

Approval to establish the foodborne disease response team and monitoring systems that will develop SOPs and guidelines on Indicator-based Surveillance (IBS) and event-based surveillance (EBS) exist. Food and Drugs Department at FMoH currently leveraging existing frameworks and plans with MDAs such as NCDC, NAFDAC, and FMARD on a case by case basis.





INFORMAL FOOD SAFETY INFORMATION SHARING MECHANISM IN 10-15 STATES THROUGH RESIDENT FOOD SAFETY OFFICERS



#### 1.5.4 Implementation Progress Since JEE (2017)

- a. Honourable Minister of Health's approval of the multi-sectoral foodborne illness detection and response team. Team yet to be identified and inaugurated
- b. Regular meeting (quarterly) of National Food Safety Management Committee (NFSMC) for proper oversight of food safety issues
- c. Effectively using the International Food Safety Authorities Network (INFOSAN) as a tool for response to Food Safety event
- d. Information sharing mechanism approved by 58th National Council on Health (NCH) in 2016 as contained in the National Policy on Food Safety and Implementation Strategy (2014). Informal information sharing mechanism in 10–15 states through resident food safety officers in respective SMoH
- e. Completion and dissemination of 1st ever Total Diet Study (TDS) in Nigeria November 2018

#### **1.5.5 Implementation Challenges**

- a. Bureaucratic/procedural issues delaying full implementation of NAPHS activities
- b. Inadequate funding and release of approved budgetary allocation to implement the NAPHS, including laboratory assessment
- c. Delayed inauguration of Food Safety emergency response team stalling the development of formal guidelines and SOPs for responsible officers to detect and respond to foodborne events across levels
- d. Limited scope of the classes of food and geographic scope of the total diet study disseminated in November 2018

#### 1.5.6 Selected Benchmarks and Priority Actions for 2020 NAPHS Implementation

- a. Review mechanism for the detection, response, and management of food safety emergencies to identify and assess gaps and needs
- b. Develop a strategy to monitor trends, detect foodborne events, response, and management of food safety emergencies
- c. Identification of stakeholders and establishment of designated units at all levels

#### **1.5.7 Relevant Documentation**

- National Policy on Food Safety and Implementation Strategy, 2014 of IHR Core Capacities of the Federal Republic of Nigeria
- National Policy Guidelines on Food Sanitation, April 2016
- National Environmental Sanitation Policy, January 2005
- Official Gazette National Environmental Health Practices Regulations, 2016
- NAFDAC Guidelines and Regulations on Food Fortification 2005, Imported Regulated Food Products at Ports of Entry in Nigeria, Food and Water Manufactured in Nigeria, Registration of Imported Food Products in Nigeria, Export of Food Commodities, Exportation of Regulated Products, Issuance of Export Approval on Cigarettes & Finished Food Seasoning For Machine Trials Prior to Import of Machine
- Proposed reviewed Animal Disease (Control) Act
- Sanitary Standard Operating Procedure (SOP) and Guidelines for Abattoirs and Slaughter House Facilities
- Institute of Public Analysts Act, 30th December 1992 CAP 116

#### **1.6 Biosafety and Biosecurity**

#### 1.6.1 Background

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, recognise 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 working 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.

Biosafety refers to the implementation of laboratory practices and procedures; specific construction features of laboratory facilities, safety equipment, and appropriate occupational health programmes when working with potentially infectious microorganisms and that has other biological hazards. Effective biosecurity measures require the cooperation of a wide range of experts such as scientists, policymakers, security engineers, and law enforcement.

Currently, there is a policy that considers biosecurity and biosafety in the plant, animal and human sectors in Nigeria. A national guideline and update of inventories are all work in progress. The score was maintained at 2 for indicator P6.1 for the following reasons; there is no countrywide training and assessment of laboratories; assessment of laboratory testing pathogen has been documented at the national level but not been done at the subnational level.

Also noteworthy is the fact that capacities for biosecurity are not in place as it is for biosafety. There is, therefore, a need to (a) Identify lead agency for leading these efforts which should reflect, officially, in all relevant documents (b) Identify and meet with all stakeholders within this technical area.

there is a need to identify lead agency for leading **biosecurity** efforts which should reflect, officially, in all relevant documents





#### **1.6.2 JEE and Mid-JEE Indicators**

BIOSAFETY AND BIOSECURITY				
JEE Score 2017 (Original JEE Tool)		JEE Score 2019 (JEE 2.0 Tool)		
P.6.1 Whole-of-government biosafety and biosecurity system is in place for human, animal and agriculture facilities	1	P6.1 Whole-of-government biosafety and biosecurity system is in place for all sectors (including human, animal and agriculture facilities)	2	
P.6.2 Biosafety and biosecurity training and practices	1	P6.2 Biosafety and biosecurity training and practices in all relevant sectors (including human, animal, and agriculture)	1	

#### 1.6.3 Rationale for 2019 Score

The Bill on Biosafety Management has been expanded and was passed into law in 2019 to include biosafety and biosecurity. In addition, efforts to develop a comprehensive national biosecurity and biosafety regulatory framework are ongoing. There is a Global Fund (Resilient and Sustainable Systems for Health, RSSH) grant specifically on enhancing laboratory biosafety and biosecurity activities in 74 laboratories across the country. Institutional and association-based level training programme on biosafety and biosecurity implemented.

#### 1.6.4 Implementation Progress Since JEE (2017)

- a. Conducted a national stakeholders' workshop for the development of a national framework on biosafety and biosecurity
- b. Pre-conference training on biosafety and biosecurity for professionals
- c. Initiated institutional community to support biosafety and biosecurity programme
- d. Improvement of laboratory infrastructure and capacity building on biosafety and biosecurity through the Global Fund grant (RSSH)

#### **1.6.5 Implementation Challenges**

- a. Partial budget release to MDAs for implementation of prioritised activities
- b. Limited skilled biosafety personnel across laboratories

#### 1.6.6 Selected Benchmarks and Priority Actions for 2020 NAPHS Implementation

- a. Development of National Regulatory Framework and Policy Document
- b. Develop and maintain inventories for dangerous pathogens
- c. Implement national biosafety & biosecurity regulations and best practices in all national, intermediate and local laboratories
- d. Carry out advocacy programme and awareness on international biosafety and biosecurity best practice
- e. Conduct national assessment on biosafety and biosecurity training gaps

#### **1.6.7 Relevant Documentation**

- National Biosafety (Implementation, etc.) Regulations, 2017
- National Biosafety Management Agency Act, 2015
- Biosafety Guidelines
- Nigeria Checklist for Biosafety Physical Containment
- Biodefense Research Programme



#### **1.7 Immunisation**

#### 1.7.1 Background

Immunisation is one of the most successful global health interventions and cost-effective ways to save lives and prevent disease. It is estimated to prevent more than two million deaths a year globally. The Expanded Programme on Immunisation (EPI) has been operational in Nigeria since 1979 and has incrementally increased the number of vaccines on the routine schedule. The programme is responsible for the purchase, distribution, and retrieval of vaccines across the country, in addition to oversight of the Routine Immunisation programme and supplemental immunisation activities and reactive vaccination campaigns. Immunisations, including outbreak response immunisations, are overseen by the National Primary Health Care Development Agency (NPHCDA), whereas surveillance for vaccine-preventable diseases is overseen by the Nigeria Centre for Disease Control (NCDC).

Measles immunisation is emphasised because it is widely recognised as a proxy indicator for overall immunisation against vaccine-preventable diseases. Countries will also identify and target immunisation to populations at risk of other epidemic-prone vaccine-preventable diseases of national importance (e.g. cholera, Japanese encephalitis, meningococcal disease, typhoid, and yellow fever). Diseases that are transferable from cattle to humans, such as anthrax and rabies, are also included.

The immunisation programme differs somewhat in implementation when compared to other IHR technical areas. A fully costed 10year strategic plan, the Nigeria Strategy on Immunisation and Primary Health Care Systems Strengthening (NSIPSS) has been developed, and its activities and objectives have been carried forward directly in the NAPHS. Efforts to strengthen surveillance and laboratory confirmation of vaccine-preventable diseases including measles, rubella, and yellow fever are captured under the surveillance and laboratory plans.

A fully costed 10-year strategic plan, the Nigeria Strategy on Immunisation and Primary **Health Care Systems** Strengthening (NSIPSS) has been developed

26 COUNTRY-LED MIDTERM JOINT EXTERNAL EVALUATION OF IHR CORE CAPACITIES

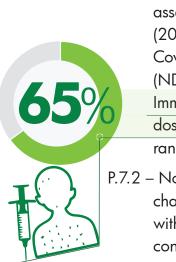


#### 1.7.2 JEE and Mid-JEE Indicators

IMMUNISATION				
JEE Score 2017 (Original JEE Tool) JEE Score 2019 (JEE 2.0 Tool)				
P.7.1 Vaccine coverage (measles) as part of national programme	3	P7.1 Vaccine coverage (measles) as part of national programme	2	
P.7.2 National vaccine access and delivery	4	P7.2 National vaccine access and delivery	4	

TION COVERAGE ESTIMATES ONAL DEMOGRAPHIC HEALTH

#### 1.7.3 Rationale for 2019 Score



- P.7.1 Change in scoring from 3 (in 2017) to 2 (in 2019 midterm assessment) due to the use of administrative data in previous (2017) evaluation, which overestimated immunisation coverage. Coverage estimates from National Demographic Health Survey (NDHS) 2018 (54%) and WHO/UNICEF Estimates of National Immunisation Coverage (WUENIC) 2018 (65%) for national first-dose measles vaccine coverages are representative and within the range for level 2 scoring (50-69% national coverage)
- P.7.2 No change, country is in the process of implementing the cold chain optimisation project that will provide over 80% of LGAs with a functional cold chain equipment. Cold chain assessment conducted in 2018

#### 1.7.4 Implementation Progress Since JEE (2017)

- a. Establishment of National Emergency Routine Immunisation Coordination Centre (NERICC) in 2017 to coordinate interventions to improve immunisation coverage and equity
- b. Implementation of nationwide and targeted measles vaccination campaigns (2017/2018 MCV with highest-ever coverage (84.5% national)
- c. MCV2 introduction into Routine Immunisation (RI) commenced with the Southern states

#### 01. PREVENT



IMPLEMENTATION OF NATIONWIDE AND TARGETED MEASLES VACCINATION CAMPAIGNS (2017/2018 MCV WITH HIGHEST-EVER COVERAGE OF 84.

- d. Approval of Cold Chain Equipment Optimization Plan (CCEOP) for implementation by GAVI and Government of Nigeria (GoN)
- e. Implementation of Community Health Influencers, Promoters and Services (CHIPS) and BHCPF to improve access to PHC services including Routine Immunisation (RI)

#### **1.7.5 Implementation Challenges**

- a. Poor access to settlements for immunisation e.g. Hard to reach areas and security challenged areas (insurgency, communal clashes etc.)
- b. Increased prevalence of vaccine hesitancy especially in northern Nigeria
- c. Limited contribution of states to commit counterpart funding to support RI programme. This has made the conduct of core immunisation activities such as outreaches irregular
- d. Poor maintenance of already existing cold chain equipment by LGA health authority

#### 1.7.6 Selected Benchmarks and Priority Actions for 2020 NAPHS Implementation

- a. Implement Cold Chain Equipment Optimisation (CCEO) Plan
- b. Implement the Community Engagement Framework (CEF) to improve knowledge of health workers and communities
- c. Introduce measles second dose vaccine to the EPI schedule (northern states 2020)

#### **1.7.7 Relevant Documentation**

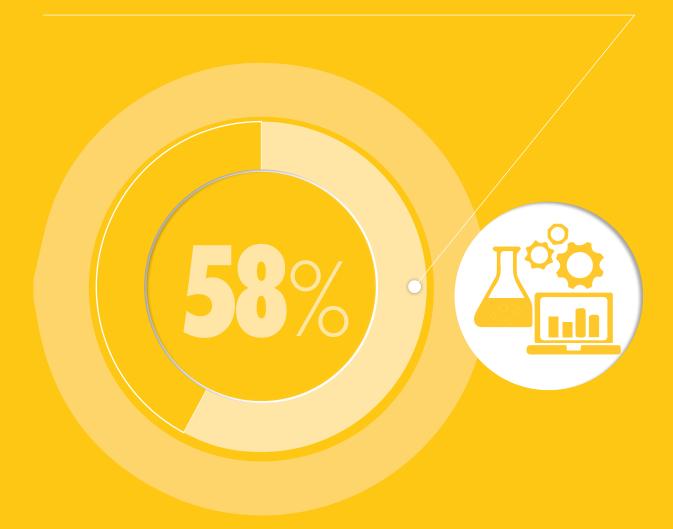
- Immunisation Basic Guide
- Basic Guide for Routine Immunisation Service Providers
- Nigeria National Immunisation Policy
- Comprehensive Multi-year Plan (CMYP 2016-2020)
- Nigeria Strategy on Immunisation and Primary Health Care Systems Strengthening (NSIPSS) strategic document 2018 - 2028
- National Action Plan for Health Security (2018)

#### 01. PREVENT

- Ward Minimum Health Care Package •
- Integrated Measles Campaign Coverage Survey •
- Measles Vaccination Campaign Study (2018) •
- Review of the Global Vaccine Action Plan (2019) •
- Measles Vaccination Coverage Survey (2018) •
- Establishment of National Emergency Routine Immunisation ٠ Coordination Centre (NERICC)



# DETECT



#### **2.1National Laboratory System**

#### 2.1.1 Background

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 specialised testing; laboratory oversight; emergency response; public health research; training and education; and partnerships and communication.

The laboratory system was introduced into Nigeria's Integrated Disease Surveillance and Response (IDSR) Strategy in 2001 as a component to supporting care and management of cases as well as mitigate impact through appropriate screening, identification and confirmation of agents of diseases of public health importance as well as monitor disease trends, changes in pathogen profile and evaluate progress of intervention among others. There is an increasing need for the public health laboratories to fulfil its other responsibilities of protecting the health of the nation through ensuring food and environmental safety as well as collaborating and communicating with the animal health component to prevent/reduce zoonotic transmission through appropriate diagnosis.

Expanding laboratory capacity is important for an effective response network which, in turn, enhances the efficiency of operation and geopolitical zone coverage. Prompt diagnosis of specimens is predicated not only in meeting up with the turnaround-time (TAT) but also ensuring that quality specimens are collected, promptly transported under biosafety and biosecurity conditions and tested using competent hands and appropriate procedures that guarantee accuracy and reproducibility. These qualities form the basis of the operation of the NCDC National Expanding laboratory capacity is important for an effective response network which, in turn, enhances the efficiency of operation and geopolitical zone coverage

#### Number of core diseases Nigeria is capable of testing



INFLUENZA, POLIO, HIV, TB, MALARIA, ENTERICS, LASSA FEVER, YELLOW FEVER, CSM AND MONKEYPOX

Reference Laboratory while also striving to integrate other components (animal health, environmental health, and food safety) that make-up one health response to achieve total health and well-being of the population.

For indicator D1.1, assessment of laboratory testing capacity has been conducted but only for human health especially the National Reference Laboratories spread across the zones in the country. Going forward, there needs to be a similar assessment across animal health and environmental laboratories with consideration for the existing zonal animal health laboratories.

Existing resources and capacities within the veterinary teaching hospitals as well as private laboratories need to be considered and assessed. While an effective sample transport mechanism exists from state to National Reference Laboratory, sample transfer below state (i.e. LGAs) needs to be strengthened for the human health sector. Better clarity on the network of laboratories in the animal health sector needs to be provided. All tests for animal health samples are carried out at the National Veterinary Research Institute, Vom.

NATIONAL LABORATORY SYSTEM				
JEE Score 2017 (Original JEE Tool)		JEE Score 2019 (JEE 2.0 Tool)		
D.1.1 Laboratory testing for detection of priority diseases	3	D1.1 Laboratory testing for detection of priority diseases	4	
D.1.2 Specimen referral and transport system	1	D1.2 Specimen referral and transport system	2	
D.1.3 Effective modern point-of-care and laboratory-based diagnostics	2	D1.3 Effective national diagnostic network	3	
D.1.4 Laboratory quality system	2	D1.4 Laboratory quality system	2	

#### 2.1.2 JEE and Mid-JEE Indicators

#### 2.1.3 Rationale for 2019 Score

D1.1 Country is capable of testing 10 core diseases: influenza, polio, HIV, TB, malaria, enterics, Lassa fever, yellow fever, CSM and monkeypox. System for quality assurance is available for influenza, polio, HIV, MTB, malaria, and enterics



#### **KEY PROGRESS** SINCE JEE 2017 50% EXPANSION OF YELLOW FEVER DISEASE LABORATORY NETWORK (FROM 4-6)

- D1.2 System in place to transport all samples including epidemicprone diseases from state capitals to referral laboratories in both human and animal health. The system lacks coordination on implementation and funding with sample movement between LGA and state hubs/laboratories for movement to referral laboratories
- D1.3 Documented tiered specific diagnostic testing strategy exists for HIV, MTB, cholera, malaria, CSM, and some zoonotic diseases.
   Point of care testing is adopted in HIV, cholera, malaria and until recently CSM
- D1.4 Documents like Medical Laboratory Science Council of Nigeria (MLSCN) Guide to Medical Laboratories continuous quality improvement and accreditation are available online but there is no evidence of their application in both human and animal health diagnostics

#### 2.1.4 Implementation Progress Since JEE (2017)

- a. Instituted sample transportation to referral laboratories and improved turnaround time
- b. Roll-out of quality management system/EQA across all referral laboratories
- c. Expansion of laboratory network by disease e.g. yellow fever (four to six), Lassa fever (four to five), rubella (zero to six)
- d. Commencement of molecular testing for yellow fever and differential testing for Lassa fever samples
- e. Commenced AMR testing and reporting to GLASS in four laboratories (up from zero)
- f. Available capacity to conduct maintenance and certification with pipeline planning to build in-house capacity
- g. Establishment of two equipment calibration and maintenance hubs

#### 2.1.5 Implementation Challenges



- Non-standardisation of supervision and inspection mechanism
- Ad-hoc sample transportation from LGA to state

#### 02. DETECT



of health facilities will be established with a mechanism to ensure transportation of specimens to national laboratories

- c. Non-availability of laboratory information management system (human and animal health information system)
- d. Non-standardisation of supply chain and inventory management system
- e. Inadequate quality and quantity of human capacity needs for diagnostics
- f. Poor governance structure in the laboratory system
- g. Absence of intermediate laboratories in the animal health system

#### 2.1.6 Selected Benchmarks and Priority Actions for 2020 NAPHS Implementation

- a. Conduct monitoring and evaluation to document diagnostics, data quality and, staff performance, and incorporate recommendations into the National Laboratory Strategic Plan
- b. Establish a mechanism to ensure transportation of specimens from 50–80% of all health facilities to national laboratories
- c. Allocate resources (human and material) to conduct appropriate diagnostic testing at the sub-national level in line with the National Laboratory Policy
- d. Develop a roadmap for laboratory inspections, licensing and accreditation in line with the Nigeria Medical Laboratory Strategic Plan

#### 2.1.7 Relevant Documentation

- Nigeria National Medical Laboratory Services Policy
- Nigeria Medical Laboratory Strategic Plan
- Nigeria National Strategic Plan for Tuberculosis
- Nigeria National Strategic Plan for Malaria
- National Biosafety Management Agency Act 2015
- Medical Laboratory Science Council of Nigeria (MLSCN) Laws
- National External Quality Assessment Laboratory Handbook
- Number of registered medical laboratories per states in Nigeria
- Guidelines for Medical Laboratory Science Council of Nigeria



(MLSCN) Accreditation Service

- Regulation for Minimum Practice Standards 2014
- Medical Laboratory Regulations for Inspection, Approval, Monitoring, and Accreditation
- Medical Laboratory Science Council of Nigeria (MLSCN) Approved Guidelines for Laboratory Designs
- Guidelines for Laboratory Continuous Quality Improvement
- National Guidelines for Setting a Medical Laboratory in Nigeria
- National Laboratory Audit Checklist
- Laboratory Accreditation Checklist
- Checklist for Medical Laboratory Inspection
- EQA Certificates for National influenza Reference Laboratory, Abuja
- Sample Transportation Guideline for Courier Services

#### **2.2 Surveillance**

#### 2.2.1 Background

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.

The Integrated Disease Surveillance and Response (IDSR) strategy were adopted in 2006 in Nigeria. The system was key in Nigeria's control of the 2014 Ebola outbreak. The National Animal Disease Information and Surveillance (NADIS) is a strategy adopted in 2006 for the surveillance/reporting of major trans-boundary animal diseases and zoonosis through the Animal Resources Information System (ARIS) platform. It was the main system used in the eradication of Rinderpest 2005 and the control of highly pathogenic avian influenza (AI) outbreak in 2010. The NAPHS provides an opportunity to plan for surveillance system strengthening, including integration and expansion of animal and human health surveillance systems and strengthening IDSR implementation.

Scoring for indicator D2.1 on surveillance systems reduced to 2 (from 3) went because of the requirement to have Indicatorbased Surveillance (IBS) and Event-based Surveillance (EBS) at the sub-national level. The use of EBS needs to reflect the various peculiarities in each state of the Federation.

Other action points of note during plenary include the integration of reporting tools between human and animal health sector, advocacy for the establishment of animal health surveillance especially at the state level and consideration to restructure the REDISSE work plan to include animal health surveillance at the state level.





02. DETECT

## sormas OPEN DATA KIT (ODK) & VETSARK (FOR ANIMAL HEALTH)

#### 2.2.2 JEE and Mid-JEE Indicators

SURVEILLANCE			
JEE Score 2017 (Original JEE Tool)		JEE Score 2019 (JEE 2.0 Tool)	
D.2.1 Indicator- and Event-based Surveillance systems	3	D2.1 Surveillance systems	2
D.2.2 Interoperable, interconnected, electronic real-time reporting system	2	D2.2 Use of electronic tools	3
D.2.3 Integration and analysis of surveillance data	3	D2.3 Analysis of surveillance data	3
D.2.4 Syndromic surveillance systems	3		

Previous indicators D2.1 and D2.4 have been merged in the new JEE tool.

#### 2.2.3 Rationale for 2019 Score

- **D2.1 Surveillance system:** Systematic immediate reporting in place for human & animal health through SORMAS & NADIS/ARIS, weekly reporting for human (IDSR002/mSERS) and monthly reporting for both (NADIS/ARIS & IDSR). EBS is not in place at the state level (intermediate level)
- **D2.2 Use of electronic tools:** Information technology tools are available at the national level (SitAware and SORMAS for human health, while animal health uses Open Data Kit ODK and Vetsark tools)
- **D2.3 Analysis of surveillance data:** Regular monthly or annual reporting of data with some delay and minimum analysis of data by staff in animal health and biannual Veterinary Epidemiology Newsletter. In human health, there is weekly reporting with analysis, regular epidemiological bulletins are disseminated and there is a dedicated data team for analysis

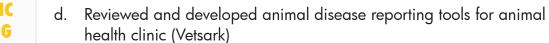
#### 2.2.4 Implementation Progress Since JEE (2017)

a. Built capacity of Federal and State Veterinary Epidemiology Officers on enhanced surveillance and disease reporting using ARIS and GIS tools



b.

c.



e. Adapted the WHO AFRO IDSR technical guidelines

transboundary animal diseases and zoonotic diseases

f. Conducted baseline assessment of reporting public and private health facilities in all states

Rehabilitated State Veterinary Public Health/Epidemiology offices

Conducted gap analysis for the existing animal health surveillance for

- g. Developed a system for routine simulation exercise annually for rare diseases to improve capacity for early detection and reporting
- h. Procured vehicles for human and animal surveillance as well as other logistic requirements for conducting surveillance

#### **2.2.5 Implementation Challenges**

- a. Limited resources/allocation of fund for implementation of activities across all levels
- b. Minimal engagement/awareness and buy-in of the private health facilities on reporting data
- c. Platform for interoperability not fully operational

Challenges are applicable to both human and animal health

#### 2.2.6 Selected Benchmarks and Priority Actions for 2020 NAPHS Implementation

- a. Implement activities and plans for Event-based Surveillance systems at national and intermediate levels
- b. Strengthen Indicator-based Surveillance in the animal health sector in states
- c. Expand electronic reporting of priority diseases to cover the remaining 21 states
- d. Produce and disseminate one health epidemiological weekly bulletin
- e. Train surveillance officers in detection, monitoring and evaluation of events and cases, with clear guidance for follow-up disseminated at state & LGA levels. Document that health workers have received training



#### 2.2.7 Relevant Documentation

- Revised Technical Guidelines for Integrated Disease Surveillance and Response in Nigeria, 2019
- Integrated Training of Surveillance Officers in Nigeria (ITSON) Training modules for DSNOs of the Federal Republic of Nigeria
- SOPs for IDSR 002 Weekly Data Validation; IDSR 003 Monthly Data Validation
- Animal disease reporting tools
- IDSR Supervisory Checklist
- NCDC SOP for Event-based Surveillance
- NADIS Reporting forms
- NCDC Weekly Epidemiological Report
- Veterinary-Epidemiology Monthly Newsletter

#### 2.3 Reporting

#### 2.3.1 Background

Health threats at the human-animal ecosystem interface have increased over the past decades, as pathogens continue to evolve and adapt to new hosts and environments, imposing a burden on human and animal health systems. Collaborative multi-disciplinary reporting on the health of humans, animals, and ecosystems reduces the risk of diseases at the interfaces between them. The national IHR focal points, OIE delegates, and WAHIS national focal point should have access to a toolkit of best practices, model procedures, reporting templates, and training materials to facilitate rapid (within 24 hours) notification of events that may constitute a Public Health Emergency of International Concern (PHEIC) to WHO and listed diseases to OIE, and will be able to rapidly (within 24/48 hours) respond to communications from these organisations.

The country has demonstrated the ability to report events to WHO, FAO, and OIE using established platforms and contact points. This reflected in the change in the self-assessed scoring from 3 to an agreed scoring of 4 by country team and evaluators. The country has demonstrated the ability to report events to WHO, FAO, and OIE using established platforms and contact points.

REPORTING				
JEE Score 2017 (Original JEE Tool)		JEE Score 2019 (JEE 2.0 Tool)		
D.3.1 System for efficient reporting to FAO, OIE and WHO	3	D3.1 System for efficient reporting to FAO, OIE, and WHO	4	
D.3.2 Reporting network and protocols in country	2	D3.2 Reporting network and protocols in-country	3	

#### 2.3.2 JEE and Mid-JEE Indicators



#### 2.3.3 Rationale for 2019 Score

- D3.1: Country has demonstrated ability to identify a potential PHEIC and file report to WHO within 24 hours and similarly to OIE (according to OIE processes) for relevant zoonotic diseases, based on an exercise or real event e.g. Lassa fever, monkeypox the Ebola outbreak in 2014, and 2015 outbreak of highly pathogenic avian influenza and equine influenza outbreaks in Nigeria
- D3.2: The country has an established protocol, processes, regulations/ legislation for reporting of PHEIC to the WHO/OIE (IMS protocols/processes, National Action Plan on Avian Influenza, etc.)

#### 2.3.4 Implementation Progress Since JEE (2017)

- a. Assessed the baseline proportion of reporting public and private health facilities
- b. Trained 16,175 health facilities surveillance focal persons in 20 states on IDSR reporting
- c. Procured laptop computers to enhance disease reporting by Federal and State veterinary epidemiologist
- d. Memo shared to NCH/NCA for enforcement of human and animal disease reporting through IDSR/ ARIS by all human and animal health practitioners
- e. Developed database for registration of private veterinary clinics, farms and livestock markets for enhanced report

#### **2.3.5 Implementation Challenges**

a. Limited availability of funds to implement some of the planned activities

#### 2.3.6 Selected Benchmarks and Priority Actions for 2020 NAPHS Implementation

a. Conduct formal evaluation of the role of the NFPs (WHO, FAO and OIE) and the coordination mechanism



- b. Dedicate accessible and sustained resources (financial, human, technical) for the IHR NFP and related activities
- Conduct after-action review or simulation exercises and apply lessons c. learnt relating to coordination and IHR NFP role

#### 2.3.7 Relevant Documentation

- Adapted IDSR Technical Guidelines 2019 •
- IDSR 003 Reports for 41 Notifiable Disease 2011-2016 •
- SOP for SORMAS Reporting •
- International Health Regulations (2005) •
- Nigeria-OIE Reports •



02. DETECT

**MORE THAN** 

PROGRAM (NFELTP

TRAINING

#### 2.4 Human Resources

#### 2.4.1 Background

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: veterinarians, animal health professionals, para-veterinarians, epidemiologists, IT specialists, etc.

The recommended density of doctors, nurses and midwives per 1,000 populations 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 populations who can systematically cooperate to meet relevant IHR and PVS core competencies. One trained epidemiologist is needed per Rapid Response Team.

The Nigeria Field Epidemiology and Laboratory Training Program (NFELTP) is a two-year advanced training established in 2008. It has trained more than 400 field epidemiologists spread across the country. They provide a robust workforce for various public health programs in the country and were a useful resource utilised to control the 2014 Ebola outbreak. A shorter training for frontline health workers has been established for more than two years, training frontline workers at local government levels. The frontline training has recently been reviewed to capture as many aspects of the health workers' training requirements as possible and was harmonised into the Integrated Training for Surveillance Officers in Nigeria (ITSON). The need for a comprehensive workforce strategy that ensures continuous training and even distribution of healthcare workers as well as establishing an incentivised career

In developing the human workforce strategy for IHR, consideration should be provided for personnel providing clinical services and should not be implemented in isolation. path for the public health workforce is an urgent need identified by the recently concluded Joint External Evaluation (JEE).

The scoring of D.4.2 is a weak 3 and it was recommended that Human Resources should be strengthened at State (sub-national) level. In developing the human workforce strategy for IHR, consideration should be provided for personnel providing clinical services and should not be implemented in isolation.

HUMAN RESOURCES				
JEE Score 2017 (Original JEE Tool)		JEE Score 2019 (JEE 2.0 Tool)		
D.4.1 Human Resources available to implement IHR core capacity requirements	3	D4.1 An up-to-date multi-sectoral workforce strategy in place	2	
D.4.2 FELTP or other applied epidemiology training programme in place	4	D.4.3 Workforce strategy	3	
		D4.3 In-service trainings are available	3	
D.4.3 Workforce strategy	2	D4.4 FELTP or other applied epidemiology training programme is in place	3	

#### 2.4.2 JEE and Mid-JEE Indicators

Indicator (D4.3) was added to this technical area in the updated version of the JEE tool.

#### 2.4.3 Rationale for 2019 Score

- D4.1 Healthcare workforce strategy available for human health but not for animal health; this is unchanged from the previous JEE assessment (previously D4.3)
- D4.2 Human Resources are available at all level but inadequate at the LGA level; appropriate cadres of healthcare workers available but inadequate
- D4.3 Regular preparedness and response courses need to be developed for multiple professions – CMEs available for doctors, nurses, pharmacists, and veterinarians
- D4.4 Only one level of FELTP training available due to the gap in training for basic FELTP in the last year

02. DETECT

#### 2.4.4 Implementation Progress Since JEE (2017)

- a. Gradual transition of NFELTP coordination and implementation to the Government of Nigeria, with the majority of funding from the REDISSE project
- b. Updated the basic FELTP training curriculum
- c. Increase in the number of staff at NCDC from 104 in 2017 to 213 in 2019

#### 2.4.5 Implementation Challenges

- a. Inability to continue the basic FELTP program in the last year
- b. Difficulty in coordinating between the different cadre of human and animal healthcare counterparts to establish competencies and requisite training

#### 2.4.6 Selected Benchmarks and Priority Actions for 2020 NAPHS Implementation

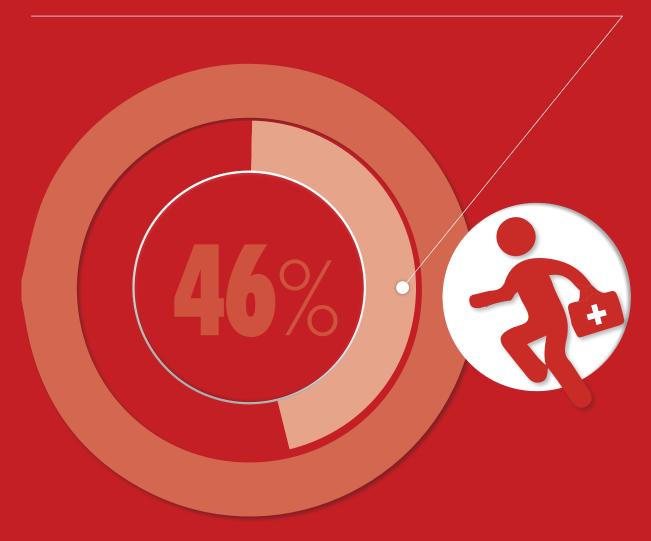
- a. Review human health workforce strategy and create animal health workforce strategy
- b. Development of training on emergency preparedness and response for all relevant cadres of healthcare professionals
- c. Development of an intermediate FELTP and ensuring the continuation of the advanced and basic FELTP in the country

#### 2.4.7 Relevant Documentation

- The Nigeria Field Epidemiology and Laboratory Training Programme
- Nigeria Health Workforce Policy Report of 2012
- Nigeria Health Workforce Strategy



## RESPOND



#### **3.1 Emergency Preparedness**

#### 3.1.1 Background

Emergency preparedness is defined as 'the knowledge, capacities and organisational systems developed by governments, response and recovery organisations, communities and individuals to effectively anticipate, respond to, and recover from the impacts of likely, imminent, emerging or current emergencies.' A state of preparedness is the combination of planning, allocation of resources, training, exercising, and organizing to build, sustain, and improve operational capabilities at national, intermediate and local or primary response level based on strategic risk assessments. A strategic risk assessment identifies, analyses and evaluates the range of risks in a country and enables risks to be assigned a level of priority. Strategic risk assessments include analyses of potential hazards, exposures and vulnerabilities, identification and mapping of available resources, and analyses of capacities (routine and surge) at the national, intermediate and local or primary levels to manage the risks of outbreaks and other emergencies. Emergency preparedness applies to any hazard that may cause an emergency, including relevant biological, chemical, radiological and nuclear hazards, natural hazards, other technological hazards, and societal hazards. For this technical area, it was agreed that focus on preparedness should actively include agencies and personnel at sub-national levels. Specifically, a preparedness and response plan should be developed at the sub-national level. These should be guided by the findings from a resource mapping exercise to be carried out at the sub-national level and involving all relevant sectors and stakeholders.

focus on preparedness should actively include agencies and personnel at sub-national levels



#### 3.1.2 JEE and Mid-JEE Indicators

EMERGENCY PREPAREDNESS			
JEE Score 2017 (Original JEE Tool)		JEE Score 2019 (JEE 2.0 Tool)	
R.1.1 National multi-hazard public health emergency preparedness and response plan is developed and implemented	1	R1.1 Strategy emergency risk assessments conducted and emergency resources identified and mapped	1
R.1.2 Priority public health risks and resources are mapped and utilised	1	R1.2 National multi-sectoral multi- hazard emergency preparedness measures, including emergency response plans, are developed, implemented, and tested	2

#### 3.1.3 Rationale for 2019 Score

- R1.1 Emergency risk assessment conducted and documented at the national level and some parts of the states (18 states). Surge capacity and mapped of trained Nigeria Field Epidemiology and Laboratory Training Programme (NFELTP) for emergencies across Nigeria
- R1.2 National multi-sectoral multi-hazard emergency preparedness plan developed

#### 3.1.4 Implementation Progress Since JEE (2017)

- a. National multi-hazard risk profiling has been conducted in 18 states using the Strategic Tool for Assessing Risks (STAR) tool
  - i. Data analysis, report writing, and validation will be concluded in the 1st quarter of 2020
  - ii. Conduct of the exercise in the remaining 18 states is in the REDISSE 2020 plan
- b. National strategic stockpiling system has been established
  - i. An electronic inventory system is being developed
  - ii. Guidelines, SOPS, and procedures for use of unregistered drugs and vaccines during emergencies are being developed
- c. The existing National Emergency Management Agency (NEMA) response plan is being reviewed with input from all stakeholders

across the sectors to ensure that it satisfies the requirements for a multi-sectoral, multi-hazard emergency preparedness and response plan

#### **3.1.5 Implementation Challenges**

- a. Slow progress with analysis, report writing and validation of the Vulnerability Risk Assessment and Mapping data
- b. Delayed receipt of input from various sectors in developing national documents (SOPs, MoU, etc.)

#### 3.1.6 Selected Benchmarks and Priority Actions for 2020 NAPHS Implementation

- a. Strategic emergency risk assessments conducted, and emergency resources identified and mapped (complete outstanding 18 states)
- b. National multi-sectoral multi-hazard emergency preparedness measures, including emergency response plans, are developed, implemented and tested

#### **3.1.7 Relevant Documentation**

- National Health Emergency Preparedness and Response Policy and Standard Operating Procedure
- Nigeria National Pandemic influenza Preparedness and Response Plan
- Armed Forces of Nigeria Pandemic Contingency Plan
- NEMA Disaster Management Plan
- NEMA National Contingency Plan
- NEMA National Crises Management Procedures
- Viral Haemorrhagic Fevers (VHFs) Preparedness Plan
- Office of the National Security Adviser National Security Strategy
- National Multi-Hazard Risk Profiling Reports
- National Multi-sectoral Multi-Hazard Emergency Preparedness Plan Draft

03. RESPOND



STATES HAVE ESTABLISHED INTERAGENCY COORDINATION COMMITTEES (ICCs) WITH DEDICATED FULL-TIME COORDINATION STAFF

#### **3.2 Emergency Response Operations**

#### 3.2.1 Background

A Public Health Emergency Operations (PHEOC) centre is a central location for coordinating operational information and resources for the strategic management of public health emergencies and emergency exercises. Emergency operations centres provide communication and information tools and services, and a management system during a response to an emergency or emergency exercise. They also provide other essential functions to support decision-making and implementation, coordination and collaboration.

#### **3.2.2 JEE and Mid-JEE Indicators**

EMERGENCY RESPONSE OPERATIONS				
JEE Score 2017 (Original JEE Tool)		JEE Score 2019 (JEE 2.0 Tool)		
R.2.1 Capacity to activate emergency operations	2	R2.1 Emergency response coordination (New)	3	
R.2.2 EOC operating procedures and plans	2	R2.2 EOC capacities, procedures and plans	3	
R.2.3 Emergency operations programme	3	R2.3 Emergency exercise management programme		
R.2.4 Case management procedures implemented for IHR relevant hazards	2		4	

Previous indicators (R2.1 and R2.2) have been merged, R2.4 moved to R4.3 in the new JEE 2nd Edition tool.

#### 3.2.3 Rationale for 2019 Score

R2.1 – Interagency Coordination Committee (ICC) has been established with dedicated full-time coordination staff and successfully scaled up to 21 states. There is a National Emergency Preparedness 03. RESPOND



Response Committee that coordinates other sectors. However, the coordination mechanism needs to be strengthened to include other stakeholders

SIMULATION EXERCISES

**IN ESTABLISHED STATE PHEOCs** 

- R2.2– National EOC in place and activated when an early warning is received. However, no evidence to show EOC activation within 120 minutes of receiving early warning signals
- R2.3 Combined exercise programme including national EOC and six sub-national PHEOCs per exercise conducted annually (Exercise Keep Pushing 1 & 2 and Regional Pandemic influenza Functional Simulation exercise)

#### 3.2.4 Implementation Progress Since JEE (2017)

- a. National and sub-national EOC in place with a coordination mechanism
- b. Identification of resources at national and sub-national levels
- c. Ability to promptly activate EOC at national and sub-national levels with staff trained on the use of plans, SOPs, and procedures
- d. Training of frontline responders (core and surge PHEOC staff) at the sub-national level
- e. Incremental involvement of sub-national levels in exercises in the last two years

#### **3.2.5 Implementation Challenges**

- a. Ownership at the sub-national level
  - i. Operational funding
  - ii. Limited number of sub-national EOC staff

#### 3.2.6 Selected Benchmarks and Priority Actions for 2020 NAPHS Implementation

- a. National coverage for sub-national PHEOCs
- b. Simulation exercises in the established states PHEOC

- c. Re-training and supportive supervision of the states PHEOC staff
- d. Strengthen national emergency response coordination mechanism

#### **3.2.7 Relevant Documentation**

- National Emergency Preparedness and Response Policy
- National Multi-sectoral Multi-Hazard Emergency Preparedness Plan -Draft
- Nigerian National Pandemic influenza Preparedness and Response Plan
- NCDC EOC Operating Procedures Plans, SOPs, and Strategies
- Armed Forces of Nigeria Pandemic Contingency Plan
- National Crises Management Procedures Office of the National Security Adviser
- Corps Medical and Rescue Services Procedures Federal Road Safety Corps
- National Disaster Response Plan National Emergency Management Agency

03. RESPOND

#### 3.3 Linking Public Health and Security Authorities

#### 3.3.1 Background

Linking public Health with security authorities is considered vital in the overall global health security agenda. Before now, public health emergencies appear limited to pure civil agencies and authorities in Nigeria with the exclusion of a core component from the military and security agencies. However, public health emergencies pose special challenges whether man-made or naturally occurring. The involvement of the military in the 2014 Ebola crisis brought to fore the need for synergy between civil and security agencies authorities during public health emergencies. Therefore, it has become imperative for a coordinated approach by linking public health practice with security authorities. Coordination efforts across to respond to public health events by public and health securities need to reflect in AAR and various Simulation exercises (SimEx). Currently, an extensively reviewed National Crises Document awaits assent by the President of the Federal Republic of Nigeria.

it has become imperative for a coordinated approach by linking public health practice with security authorities.

#### **3.3.2 JEE and Mid-JEE Indicators**

LINKING PUBLIC HEALTH AND SECURITY AUTHORITIES					
JEE Score 2017 (Original JEE Tool) JEE Score 2019 (JEE 2.0 Tool)					
R.3.1 Public health and security authorities (e.g. law enforcement, border control, customs) are linked during a suspect or confirmed biological event	1	R3.1 Public health and security authorities e.g. law enforcement, border control, customs) are linked during a suspect or confirmed biological event	2		



#### 3.3.3 Rationale for 2019 Score

Establishment of point of contact across relevant partner MDAs. Initiated cordial relationships and the presence of instruments of coordination and control among stakeholders. Establishment of TWG across MDAs. However, there is an inability to conduct simulation exercises aimed at capacity building for the relevant cadre of staff across MDAs

#### 3.3.4 Implementation Progress Since JEE (2017)

- a. Establishment of TWG at the Office of the National Security Adviser (ONSA) –with focal persons identified across relevant sectors
- b. Inaugural meeting of TWG members with open communication ongoing
- c. One mini-table top exercise to test coordination and control across all relevant sectors (Public Health agencies and Security agencies)
- d. Development of a resource sharing framework (in progress) to identify logistics assets and SOPs to access them

#### **3.3.5 Implementation Challenges**

- a. Absence of definitive MOUs for and among and stakeholders
- b. Absence of dedicated funds for program
- c. Delayed buy-in by CEOs/DGs of MDAs resulting from a highly hierarchical system

### 3.3.6 Selected Benchmarks and Priority Actions for 2020 NAPHS Implementation

- a. Harmonisation of relevant instruments and development of MOUs for stakeholders (including the development of protocols and procedures that will constitute the terms of the MoU, information sharing triggers, etc.)
- b. Training of frontline officers and middle cadre staff on event assessment, application of triggers, information sharing and response among all stakeholders



c. Joint capacity building (tabletop/full-scale operational simulation exercises) on public health emergencies and disasters (testing for events of deliberate origin)

#### 3.3.7 Relevant Documentation

- Statement by Nigerian Delegation at the Meeting of Governmental Experts of the Biological Weapons Convention Geneva, Switzerland (2008)
- Nigerian Experience of the Biological and Toxin Weapons Convention at the Meeting of the State's Parties to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (biological) and Toxin Weapons and on their Destruction (2007)
- MoU between National Environmental Standards and Regulations Enforcement Agency (NESREA), National Orientation Agency (NOA) and National Emergency Management Agency (NEMA)
- Emergency Preparedness and Response Plan For Highly Pathogenic Avian influenza (HPAI) in Nigeria (Human health component, 2015)
- Nigerian Quarantine Act (1926)
- National Contingency Plan (NEMA)
- Bill for an Act to Establish the Nigeria Public Health (Quarantine, Isolation and Emergency Health Matters Procedure) Act to Provide for and Regulate the Imposition of Quarantine, Isolation and to Make Other Provisions for Preventing the Introduction into and Spread in Nigeria, and Regulate Steps for the Containment in Nigeria, and the Transmission from Nigeria, of Dangerous Infectious and Communicable Diseases, Organisms and Agents
- SOP for resource sharing framework

#### 3.4 Medical Countermeasures and Personnel Deployment

#### 3.4.1 Background

Medical countermeasures are vital to national security and protect nations from potentially catastrophic infectious disease threats. Investments in medical countermeasures create opportunities to improve overall public health. In addition, it is important to have trained personnel who can be deployed in case of a public health emergency response. Regional (international) collaboration will assist countries in overcoming the legal, logistical and regulatory challenges to deployment of public health and medical personnel from one country to another. Case management procedures should be available to all staff and implemented across the system during health emergencies due to IHR related hazards.



Case management procedures should be available to all staff and implemented across the system during health emergencies due to IHR related hazards..

#### 3.4.2 JEE and Mid-JEE Indicators

MEDICAL COUNTERMEASURES AND PERSONNEL DEPLOYMENT				
JEE Score 2017 (Original JEE Tool)		JEE Score 2019 (JEE 2.0 Tool)		
R.4.1 System in place for sending and receiving medical countermeasures during a public health emergency	1	R4.1 System in place for activating and coordinating medical countermeasures during a public health emergency	2	
R.4.2 System in place for sending and receiving health personnel during a public health emergency	2 System in place for sending and receiving health personnel during a public health emergency 2		1	
		R4.3 Case management procedures implemented for IHR relevant hazards (R2.4 from JEE v1)	2	

Indicator R4.3 was moved from R2.4 (case management).

#### 3.4.2 Rationale for 2019 Score

R4.1- A draft medical countermeasures plan is available

R4.2 – No national personnel development plan drafted for activating

03. RESPOND

#### CASE MANAGEMENT GUIDELINES – LASSA FEVER, CHOLERA, MONKEYPOX MEASLES – DEVELOPED AND DISSEMINATED TO STATE AND TREATMENT CENTRES

and coordinating health personnel during a public health emergency

R4.3 – Availability of case management guidelines for Lassa fever, cholera, monkeypox and measles developed and disseminated to state and treatment centres. Standard operating procedures (SOPs) developed for Lassa Fever and Ebola control and treatment

#### 3.4.3 Implementation Progress Since JEE (2017)

- a. Draft National Medical Countermeasure (MCM) Plan developed
- b. Standard operating procedures developed SNS/MCM
- c. Facilitator, participant training manual developed including training worksheet for SNS/MCM
- d. Development of a zero draft protocol for Rapid Response Teams
- e. Case management guidelines for Lassa fever, cholera, monkeypox and measles developed and disseminated to state and treatment centres
- f. SOPs developed for Lassa fever and Ebola control and treatment

#### **3.4.4 Implementation Challenges**

- a. Multiple outbreaks in Nigeria affected the development of the plan
- b. Lengthy fund release processes

#### 3.4.5 Selected Benchmarks and Priority Actions for 2020 NAPHS Implementation

- a. Review, update and finalise MCM draft plan to activate and coordinate MCM during public health emergencies
- b. Develop a standard protocol for administrative support at all levels for MCM asset management
- c. Train multi-disciplinary team of early responders (NEMA, FMoH, FMARD, FMEnv and NCDC) in the appropriate use and management of MCM

#### 03. RESPOND

#### 2020 NAPHS **CLION**

 Conduct a stakeholder meeting to determine baseline capacity/ capabilities of relevant ministries and partnering agencies for the deployment of Emergency Management Teams (EMTs)

- e. Develop protocols, SOPs, technical guidelines and toolkits for sending and receiving health personnel, and for sharing information as appropriate
- f. Develop case management guideline for other IHR hazards

#### 3.4.7 Relevant Documentation

- Draft National Medical Countermeasure (MCM) plan
- Standard Operating Procedures for MCM
- Training Manual MCM
- Draft Rapid Response Team Protocol
- Disease-specific Case Management Guidelines
- National Contingency Plan on Infrastructural Resuscitation (2010)
- National Emergency Management Agency (NEMA) Emergency Response Standard Operating Procedures (2010)
- National Disaster Management Framework (2010)
- NAFDAC guidelines for importing drugs as seen on the NAFDAC website (2017) http://www.nafdac. gov.ng/index.php/guidelines/ drug-guidelines
- Viral Haemorrhagic Fevers (VHFs) Preparedness and Response Plan (2017)
- National Biotechnology Development Agency (NABDA) Plan of Action and Competencies as seen on the NABDA website (2017) www.nabda.gov.ng
- UN Report on Global Response to Health Crises (2018)

03. RESPOND

### REPRIORITY

SIMULATION EXERCISES IN ESTABLISHED STATE PHEOCs

#### 3.5 Risk Communications

#### 3.5.1 Background

Risk communications should be a multi-level and multi-faceted process that 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.

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

RISK COMMUNICATIONS				
JEE Score 2017 (Original JEE Tool)		JEE Score 2019 (JEE 2.0 Tool)		
R.5.1 Risk communication systems (plans, mechanisms, etc.)	1	R5.1 Risk communication systems for unusual/unexpected events and emergencies	2	
R.5.2 Internal and partner communication and coordination	3	R5.2 Internal and partner coordination for emergency risk communication	3	
R.5.3 Public communication	2	R.5.4 Communication engagement with affected communities	3	
R.5.4 Communication engagement with affected communities	2	R5.4 Communication engagement with affected communities	3	
R.5.5 Dynamic listening and rumour management	2	R5.5 Addressing perceptions, risky behaviours and, misinformation	4	

#### 3.5.2 JEE and Mid-JEE Indicators



#### 3.5.3 Rationale for 2019 Score

- R5.1– All infectious diseases and multi-hazard risk communication strategies have been developed and being piloted: strategy copy and list of contributors submitted; existing NCDC core team to implement the strategies
- R5.2 There is an existing functional National Risk Communication Technical Working Group that meets quarterly: List of members submitted; consistent at attending meetings
- R5.3 There are trained spokespersons and proactive engagement of the media has begun and multiple channels of communication are used with wide geographical coverage
- R5.4 There are state and LGA health educators for community engagement at the sub-national level. There are social mobilisation committees at the state and LGA levels
- RS.5 Leverage the connect centre to systematically gather information on rumour and misconception for analysis to inform the development of targeted messaging and risk communication approaches

#### 3.5.4 Implementation Progress Since JEE (2017)

- a. Multi-sectoral and multi-partner national risk communication Technical Working Group established
- b. All infectious diseases risk communication strategy developed
- c.. Multi-hazard risk communication plan being developed

#### **3.5.5 Implementation Challenges**

- a. Limited funding for risk communication activities at national and subnational levels
- b. Lack of monitoring and evaluation framework for risk communication

c. No robust structure for risk communication coordination at subnational levels

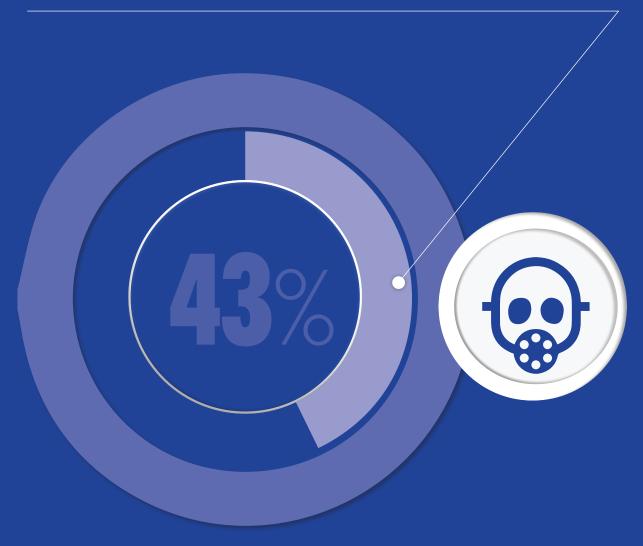
#### 3.5.6 Selected Benchmarks and Priority Actions for 2020 NAPHS Implementation

- a. Finalise the risk communication toolkit with the monitoring and evaluation framework
- b. Support the building of risk communication coordination structures at sub-national levels
- c. Develop the capacity of risk communicators at the national and subnational level

#### **3.5.7 Relevant Documentation**

- Multi-hazard Risk Communication Strategies
- Communication and Social Mobilization Support Plan
- Multi-lingual IEC Materials on specific diseases (Posters and Brochures)
- Nigeria National Pandemic Influenza Preparedness and Response Plan – Communications and Public Education
- National Distribution Plans Communication Materials
- Video Connect Centre TV advert
- Multi-lingual disease-specific radio jingles
- Report of Media Stakeholder Engagement
- Reports of Meeting with Religious Leaders, Health professionals, and CSOs Stakeholder Engagement





#### 4.1 Points of Entry

#### 4.1.1 Background

All core capacities and potential hazards apply to 'points of entry' and thus enable the effective application of health measures to prevent the international spread of diseases. State Parties are required to maintain core capacities at designated international airports and ports (and when 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.

The Port Health Services Division in the Public Health Department, Federal Ministry of Health, was established in 1925 in response to the outbreak of Plague which began in Europe, and later spread to West Africa to the then Gold Coast (now Ghana) and then Lagos. Port Health Services is charged with the responsibility to prevent the cross-border/ international spread of disease in compliance with the World Health Organization (WHO) International Health Regulations (IHR 2005) through the implementation and application of health measures under the IHR (2005).



The Port Health Services Division in the Public Health Department, Federal Ministry of Health, was established in 1925

POINTS OF ENTRY			
JEE Score 2017 (Original JEE Tool)		JEE Score 2019 (JEE 2.0 Tool)	
PoE.1 Routine capacities established at points of entry	1	PoE.1 Routine capacities established at points of entry	3
PoE.2 Effective public health response at points of entry	1	PoE.2 Effective public health response at points of entry	1

#### 4.1.2 JEE and Mid-JEE Indicators



#### 4.1.3 Rationale for 2019 Score

- PoE.1 PoEs have been designated, staff have been trained on a diverse set of capacities as defined by the IHR (2005) annexe 1b, Public Health Emergency Contingency Plans (PHECPs) and SOPs have been developed, reviewed and tested via simulation exercises and real events (e.g. the effective coordination demonstrated during the 2019 Ebola scare in Murtala Mohammed International Airport (MMIA), Lagos
- PoE.2 Public Health Emergency Contingency (PHECPs) Plans have been developed, tested and reviewed for MMIA, Nnamdi Azikiwe International Airport (NAIA) and Mallam Aminu Kano International Airport (MAKIA). Apapa seaport has begun the process of developing a PHECP. There would have been great progress on the scores if the attributes for indicator 2 had not significantly changed in JEE 2.0 tool – from only requiring a National PHECP to requiring a PHECP at each designated PoE

#### 4.1.4 Implementation Progress Since JEE (2017)

- a. Designated four PoE MMA, NAIA, MAKIA, Apapa seaport
- b. Developed, tested, reviewed and adopted PHECPs and SOPs for some designated PoE
- c. The draft National PHECP PoE has been developed, reviewed and tested
- Implementing a continuous Port Health Services workforce development strategy – including instituting onboarding, supportive supervision, a Master Training Programme, a Learning Management System, outbreak specific preparedness training, etc.

#### 4.1.5 Implementation Challenges

- a. Inadequate national legislative backing for PHS at PoE
- b. Limited cross border collaboration at ground crossings
- Inadequate all-hazards coordination at PoE chemical and radiation components in existing plans and protocols not allinclusive and robust enough



INSTITUTIONALISE AND EXPAND CROSS-BORDER COLLABORATION ON SURVEILLANCE AND RESPONSE ACROSS ALL NIGERIAN BORDERS

#### 4.1.6 Selected Benchmarks and Priority Actions for 2020 NAPHS Implementation

- a. Implementation of a post-designation action plan for designated PoE, including development and testing of a PHECP for Apapa, reviewing and testing of PHECPs at designated airports and ensuring a hygienic and sanitary environment for travellers
- Commence the process of repealing and replacement of the 1926 Quarantine Act and as a stop-gap measure, facilitate executive assent of the draft subsidiary legislation to the Act
- c. Institutionalise and expand cross border collaboration on surveillance and response across all Nigerian borders

#### 4.1.7 Relevant Documentation

- Designation certificate for the MMA, NAIA, MAKIA, Apapa seaport
- Draft National Public Health Emergency Contingency Plan at the Point of Entry
- MMIA, NAIA, Idi-iroko ground crossing Post-Baseline IHR Assessment Report
- MAKIA and Seme Baseline IHR Assessment Report
- MOUs between MMIA and NAIA and referral facilities
- Copies of Mutual Aid Agreement at NAIA, MMA, and MAKIA
- Documented Standard Operating Procedures from MMIA and NAIA PHECPs (Inspection, decontamination, transportation, management, identification of ill traveller, communication/ notification, handling human of remains)
- The National Civil Aviation Public Health Preparedness Plan
- MMIA, NAIA, Idi-iroko Public Health Emergency Contingency Plans
- Port Health Services Standard Operating Protocols
- Referral Facilities Assessment Reports

- Evidence of communication between referral facilities and PHS • (letters, emails, etc)
- Port Health Service (PHS) Draft Policy Document
- The Nigerian Quarantine Act (1926)
- The resolution of the NCH on International Certificate of Vaccination on yellow fever
- FAAN contractual documents/Reports of vector control activities • from the Federal Airports Authority of Nigeria (FAAN)/vendors/ PHS

#### 4.2 Chemical Events

#### 4.2.1 Background

Timely detection and effective response of potential chemical risks and/or events require 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 risk or events and effective communication and collaboration among the sectors responsible for chemical safety.

The chemical event program was put in place to address health issues related to chemical risk and poison in air, water, wastewater, soil sediment, human, plant and animal specimens and products. This plan seeks to further strengthen inter-agency capacity to monitor and respond to chemical events.

**State Parties** need to have surveillance and response capacity to manage chemical risk or events and effective communication and collaboration among the sectors responsible for chemical safety.

#### 4.2.2 JEE and Mid-JEE Indicators

CHEMICAL EVENTS			
JEE Score 2017 (Original JEE Tool)		JEE Score 2019 (JEE 2.0 Tool)	
CE.1 Mechanisms established and functioning for detecting and responding to chemical events or emergencies	1	CE.1 Mechanisms established and functioning for detecting and responding to chemical events or emergencies	1
CE.2 Enabling environment in place for management of chemical events	2	CE.2 Enabling environment in place for the management of chemical events	2

The two indicators CE1 and CE2 scores remained the same because there were no supporting pieces of evidence (guidelines or manuals on surveillance, assessment, and management of chemical events, intoxication and poisoning) to justify the scoring for limited capacity.



#### DRAFT PUBLIC HEALTH STRATEGY ON ARTISANAL AND SMALL SCALE GOLD MINING (ASGM)



#### 4.2.3 Rationale for 2019 Score

2017 and 2019 scores remained the same because there was no supporting evidence for the rationale given. A needed action point here includes the translation of approval policy into a national action plan, review and update relevant stakeholders.

Despite this, Nigeria has a National Policy On Chemical Management that determines the roles and the responsibility of ministries, departments, and agencies that involves chemical management in the country. These stakeholders are FMoH, FMEnv, FMARD, FMTI, FMST, NEMA, etc.

The country has developed an inventory of Polychlorinated Biphenyl (PCB) contaminated sites in the country using PCB management program in the Federal Ministry of Environment. The country has national guidelines for the establishment of Poison Information Control and Management Centre.

Nigeria is a signatory and an implementing party to the Minamata, Stockholm and Basel Conventions, and Strategic Approach for International Chemicals Management (SAICM). In 2019, Nigeria developed the draft public health strategy on Artisanal and Small Scale Gold Mining (ASGM) using an established coordination framework of stakeholders from various sectors.

#### 4.2.4 Implementation Progress Since JEE (2017)

a. Permanent Secretary, Federal Ministry of Health granted approval on the establishment of a National Committee on Chemical Surveillance and Emergency System in collaboration with NCDC and NAFDAC



- Public health assessment of Artisanal and Small Scale Gold Mining (ASGM) sites for the development of the National Action Plan (NAP) on Mercury
- c. Identified stakeholders to be part of the committee

#### 4.2.5 Implementation Challenges

- a. Bureaucratic procedures in MDAs
- b. Inadequate funding for conducting an assessment and updating the inventory of hazardous chemical sites in the country
- c. Inadequate funding for the establishment of poison information control and management centres in seven tertiary healthcare facilities in the country

#### OPERATIONALISE THE NATIONAL COMMITTEE ON CHEMICAL SURVEILLANCE AND EMERGENCIES

#### 4.2.6 Selected Benchmarks and Priority Actions for 2020 NAPHS Implementation

- a. Operationalise the National Committee On Chemical Surveillance And Emergencies
- Begin review of policies and legislative framework for chemical event surveillance alert and response to ensure consistency with IHR requirements
- c. Assess resource requirements for chemical events surveillance detection and response and develop an action plan for addressing gaps
- d. Develop SOPs and training manuals for post-2020

#### 4.2.7 Relevant Documentation

- National Policy on Chemicals Management
- Lead Poison Report in Niger and Zamfara State
- Chemical Event Technical Tool
- National Chemical Regulations
- National Guidelines for Establishment of Poison Information, Control and Management Centres in Nigeria
- National Disaster Response Plan
- Chemical Regulation
- Draft Public Health Strategy on Artisanal and Small Scale Gold Mining (ASGM)
- National Action Plan on Mercury Draft

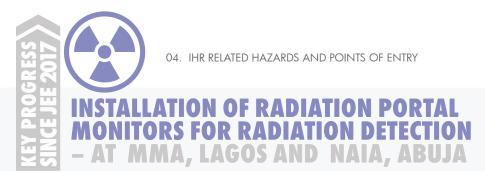
#### 4.3 Radiation Emergencies

#### 4.3.1 Background

To respond to nuclear and radiological emergencies, timely detection and effective response towards potential radiological and nuclear hazards/events/emergencies require collaboration with sectors responsible for radiation emergency management in Nigeria. Nigeria has a well-developed legislative framework for the control of radiation sources and emergencies. The designated responsible authority for the implementation of these regulations in Nigeria is the Nigerian Nuclear Regulatory Authority (NNRA). NNRA works in partnership with the National Emergency Management Agency (NEMA) to coordinate the response to radiation emergencies. A large number of multisectoral stakeholders with responsibilities in the preparedness and response to radiation events have been identified and response is coordinated through a National Nuclear and Radiological Emergency Plan (NNREP). The Plan was developed by the National Nuclear and Radiological Emergency Committee (NNREC) set-up by the NNRA in 2004 and it was completed in 2005 and circulated to stakeholders for comments and inputs. The Plan assigns to NEMA overall co-ordination and to NNRA technical support functions, which begin at the initial notification of a nuclear and or radiological emergency and end when all government agencies have terminated their response activities. Although this plan is regularly reviewed and updated, testing has been limited to internal drills within licensed premises and the plan has never been tested through planned multi-agency exercises or in response to an actual radiation incident.

Nigeria has a welldeveloped legislative framework for the control of radiation sources and emergencies.

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#### 4.3.2 JEE and Mid-JEE Indicators

RADIATION EMERGENCIES			
JEE Score 2017 (Original JEE Tool)		JEE Score 2019 (JEE 2.0 Tool)	
RE.1 Mechanisms established and functioning for detecting and responding to radiological and nuclear emergencies	3	RE.1 Mechanisms established and functioning for detecting and responding to radiological and nuclear emergencie	3
RE.2 Enabling environment in place for management of radiation emergencies	3	RE.2 Enabling environment in place for the management of radiological and nuclear emergencies	3

#### 4.3.3 Rationale for 2019 Score

Technical guidelines for radiation emergencies exist within NNRA and NEMA. National Nuclear and Radiological Emergency Plan (NNREP) remains in force. Documentation for unchanged indicators verified for 2017 JEE at level 3/3; no decrease in planning level despite lack of significant progress.

#### 4.3.4 Implementation Progress Since JEE (2017)

- a. Installation of Radiation Portal Monitors for radiation detection at Abuja Airport and MMIA, Lagos
- b. Training of staff and stakeholders on detection and response capability with radiation monitors and other detection equipment
- c. Installation of Central Alarm Station (CAS) for surveillance, detection, and response

#### 4.3.5 Implementation Challenges

- a. Inadequacy of human and technical resources in public health facilities at all levels for matters relating to nuclear and radiological emergencies
- b. Lack of effective coordination and collaboration with stakeholders in emergency response
- c. Inadequate financial resources to meet the needs of radiation safety
- d. Limited training opportunities for relevant staff across designated

#### SHARE INFORMATION WITH RELEVANT STAKEHOLDERS REGULARLY ON THE RISK AND THREATS THAT ARE POTENTIAL FOR EMERGENCIES

hospitals to enhance detection capabilities with radiation monitors and other detection equipment.

e. Delay in project execution due to a change in leadership at the NNRA. The position of the Acting DG/CEO is limited to approve execution of projects

#### 4.3.6 Selected Benchmarks and Priority Actions for 2020 NAPHS Implementation

- a. Conduct after-action reviews or simulation exercises in the absence of real events to:
  - i. Evaluate/test the guidelines/SOPs Conduct jointly with the competent radiation authorities and the relevant public health units
  - ii. Test coordination and communication mechanisms between relevant national competent authority for nuclear regulatory control/safety and relevant sectors
  - iii. Test case management capacity; and update guidelines/ SOPs and coordination and communication mechanisms based on the findings
- Ensure that SOPs call for prepositioning of logistics to address a radiation emergency, distribute logistics to all designated places at all times and maintain an updated inventory
- c. Share information with relevant stakeholders regularly on the risk and threats that are potential for emergencies

#### 4.3.7 Relevant Documentation

- CERT Emergency Plan
- CERT Operational Radiation Safety
- NHA Local Rules for Radiation Protection in the Radiology Department

- NHA Local Rules for Radiation Protection in Radiotherapy and **Oncology Department**
- Protocols on Nuclear Medicine Procedures
- Protocol for the Treatment of Radiation Injuries
- IAEA Manual for First Responders to Radiological Emergency
- IAEA Response and Assistance Network (RANET)
- IAEA Preparedness and Response for a Nuclear or Radiological Emergency
- IAEA Guidelines on the Harmonisation of Response and Assistance Capabilities for a Nuclear Or Radiological Emergency



# Appendix 1:

## MIDTERM JEE BACKGROUND

#### a. Mission place and dates

Abuja, Nigeria; 18 – 22 November 2019

#### **b. Mission Team Members**

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#### c. Objective

To re-assess Nigeria's capacities and capabilities relevant to the 19 technical areas of the JEE 2nd Edition tool for providing baseline data to support Nigeria's efforts to reform and improve its public health security. Specifically, this was to;

- Use the JEE 2.0 Tool for self-assessment
- Review current progress and challenges in the implementation of the National Action Plan for Health Security (NAPHS 2018-2022)
- Compare self-assessed scores to WHO Benchmarks Tools
- Identify immediate next steps to implement in 2020
- Map 2020 work plan to partners' resources

#### d. The Midterm JEE Process

The midterm JEE process was an abridged process that incorporated an internal assessment and a peer-to-peer review by a team of external evaluators. The entire evaluation included discussions around the NAPHS implementation progress and challenges since the development of the NAPHS and identification of priority actions for 2020 using the WHO Benchmarks Tool for IHR. The team of external evaluators and host-country experts sought full agreement on all aspects of the report findings and recommendations.

#### e. Limitations and Assumptions

- The evaluation was limited to one week, which limited the amount and depth of information that could be managed
- It is assumed that the results of this evaluation will be publicly available
- The evaluation is not just an audit. Information provided by Nigeria will not be independently verified but will be discussed and the evaluation rating mutually agreed to by the host country and the evaluation team. This is a peer-to-peer review

#### f. Key Host Country Participants and Institutions

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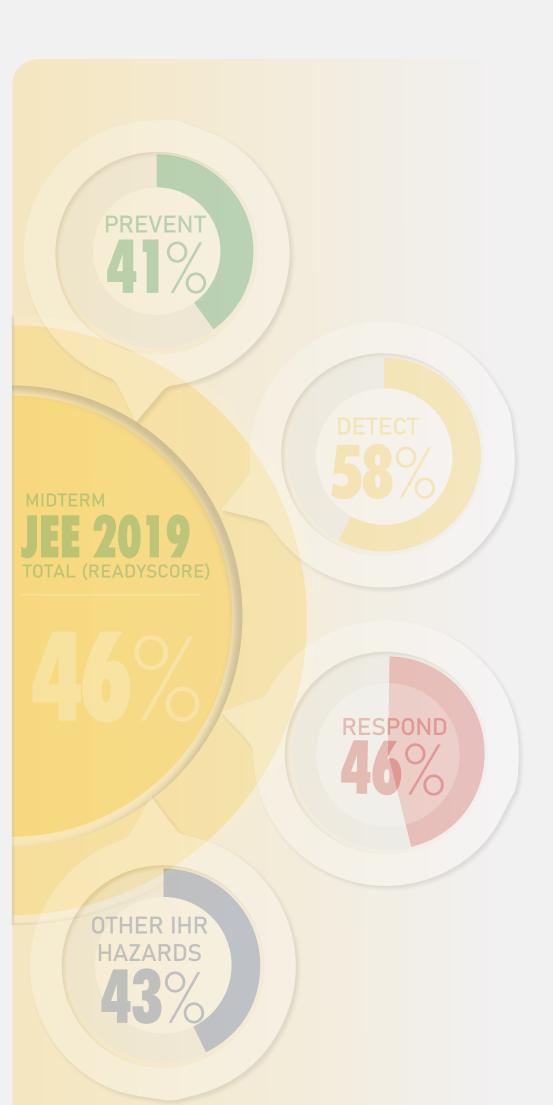
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#### FEDERAL REPUBLIC OF NIGERIA

COUNTRY-LED MIDTERM JOINT EXTERNAL EVALUATION OF IHR CORE CAPACITIES

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