

# National Primary Health Care Development Agency



## Mpox Vaccination Rollout

### Implementation Training

November 2024



NATIONAL PRIMARY HEALTH CARE DEVELOPMENT AGENCY



# Objectives and Expected Outcomes

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# The Objectives of the Mpox Vaccine Introduction Training in Nigeria

1. To update the knowledge of Health Workers on Mpox vaccines
2. To update the knowledge and skill of health workers on Mpox vaccination delivery strategy
3. To update the knowledge and skill of health workers on the handling, storage, distribution, administration and waste management of the Mpox Vaccine
4. To update the knowledge and skill of health workers on risk communication, demand creation and mobilizing communities for Mpox vaccination



# Expected Outcomes of the Mpox Vaccine Introduction Training in Nigeria



1. Health Workers are knowledgeable on Mpox vaccines
2. Health workers' knowledge and skills on Mpox vaccination delivery strategy is well improved
3. Health workers' capacity is built on the handling, storage, distribution, administration and waste management of the Mpox vaccine
4. Improved knowledge and skill of health workers on risk communication, demand creation and mobilizing communities for Mpox vaccination
5. Health workers updated on the current practices in surveillance and management of AEFI for the Mpox vaccine



*Thank  
you*





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# Introduction to Mpox Vaccination

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# Background



- The Federal Government through the NPHCDA requested 10,000 doses of the Mpox vaccine from the United States Government, the request was granted and the Mpox vaccines have arrived Nigeria on the 27<sup>th</sup> August 2024.
- The request was made in response to the 2022 outbreak of Mpox in Nigeria where the country recorded a high number of cases of the Clade II type.
- With the declaration by the Africa Centre for Disease Control and Prevention (AfCDC) and the World Health Organization in August 2024 declared Mpox as a Public Health disease of Continental Security as the outbreak is spreading through Africa particularly East Africa with the more virulent strain of Clades Ib.
- **The vaccine is a preventive measure and targeted at limiting the outbreaks**
- Therefore, it is important that plans are in place to ensure adequate planning, equitable distribution, demand generation and judicious utilization of the vaccines across the targeted States as part of the FGoN and the NPHCDA's strategy of improving access to basic health services
- This training is aimed at efficiently deploying the first 10,000 doses of this vaccine.



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# Section 1: Basic Facts on Mpox & How Mpox Vaccine Works

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**WHO**



# Learning objectives and expected outcomes

The objectives of this section are to:



- Understand the epidemiology of mpox in Nigeria
- Identify key facts about mpox, including its transmission, symptoms, and risks
- Explain preventive measures to reduce the spread of mpox
- Describe how the mpox vaccine works and its role in preventing outbreaks and the vaccination strategy for the deployment

Expected outcomes:

- Enhanced knowledge of mpox epidemiology and prevention
- Improved ability to educate communities on preventing mpox
- Improved understanding of the mpox vaccine's benefits, side effects, and administration protocols
- Better knowledge to contribute to mpox vaccination deployment and outbreak response





# What is Mpox(Monkeypox)?


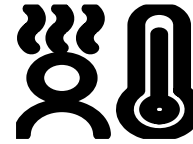







- Mpox is an illness caused by the monkeypox virus.
- Monkeypox virus is a member of the Orthopoxvirus genus, which also includes smallpox, cowpox, etc
- It is a viral infection that can spread between people, mainly through close contact, and occasionally from the environment to people via things and surfaces that a person with mpox has touched
- In settings where the monkeypox virus is present among some wild animals, it can also be transmitted from infected animals to people who have contact with them



# Signs and symptoms of mpox



Category	Description	Pictorial representation of mpox symptoms
<b>Common symptoms</b> 	<ul style="list-style-type: none"><li>▪ Rash lasting 2–4 weeks, resembling blisters or sores</li><li>▪ Fever, headache, muscle aches, back pain, low energy, swollen lymph nodes</li><li>▪ Rash can affect face, hands, feet, groin, genital, and anal regions</li><li>▪ Lesions may also appear in mouth, throat, anus, rectum, vagina, or eyes</li><li>▪ Number of lesions can range from one to several thousand</li></ul>	<p data-bbox="1694 221 2497 271">Pictorial representation of mpox symptoms</p> <div data-bbox="1732 357 1923 499"><p data-bbox="1732 521 1834 564">Fever</p></div> <div data-bbox="2025 349 2140 478"><p data-bbox="2025 506 2191 549">Back pain</p></div> <div data-bbox="2293 357 2420 478"><p data-bbox="2280 506 2382 549">Rash</p></div> <div data-bbox="1745 714 1847 835"><p data-bbox="1732 871 1911 913">Headache</p></div> <div data-bbox="2025 699 2140 821"><p data-bbox="2025 849 2165 942">Muscle ache</p></div>
<b>Severe symptoms</b> 	<ul style="list-style-type: none"><li>▪ Inflammation of the rectum (proctitis) causing severe pain</li><li>▪ Inflammation of the genitals causing difficulties urinating</li></ul>	

▪ Symptoms may resolve on their own with supportive care (pain/fever management) within a few weeks

▪ **Treatment for severe cases:** Hospitalization, supportive care, and antiviral medications may be required for severe mpox to reduce lesion severity and recovery time.]



# Mpox has different modes of transmission, however it is primarily transmitted from person-to-person



## Modes of transmission

1

### Person-to-person transmission



- Spreads primarily through close contact (skin-to-skin, mouth-to-mouth, mouth-to-skin), including sexual contact, and face-to-face interactions (talking, breathing)
- Infectious until all lesions crust over, scabs fall off, and new skin forms (typically 2–4 weeks)
- Virus can persist on contaminated objects (clothing, bedding, surfaces); touching these can cause infection, especially with cuts or touching mucous membranes
- Can spread from parent to child during pregnancy, birth, or close contact

2

### Animal-to-human transmission



- Occurs through physical contact with infected animals (monkeys, rodents) via bites, scratches, or activities like hunting and preparing meat
- Eating undercooked contaminated meat can also lead to infection
- Risk can be reduced by avoiding unprotected contact with wild animals and ensuring meat is thoroughly cooked.

3

### Environmental transmission



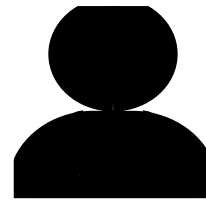
- Virus can persist on contaminated surfaces or objects
- Touching contaminated items and then touching eyes, nose, or mouth can lead to infection
- Cleaning and disinfecting surfaces and hand hygiene are crucial for preventing transmission from objects.



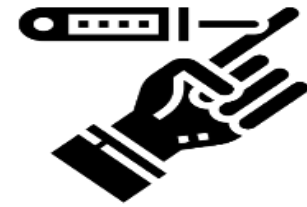
# Who are the people at risk of getting infected?

Everyone is at risk of contracting Mpox because it affects all ages. However, health care workers have an additional job-related risk. Other groups with greater risk of severe disease include:

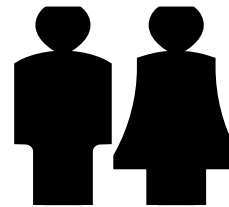
- Close contact with infected persons
- People with chronic illnesses – diabetes, heart disease, hypertension
- People with conditions that lower the body's immunity –e. g. HIV/AIDS
- People with high-risk sexual behaviors



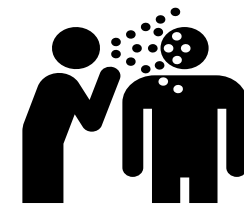
Healthcare workers



Immunocompromised people



People with high-risk sexual behaviors



Close contact with affected persons



# General preventive measures



## Strategies

## Details

1

### Self-Protection

- Avoid close contact with anyone who has mpox, including sexual contact
- Practice good hand hygiene: Wash hands frequently with soap and water or use an alcohol-based hand rub
- In areas with wild animals carrying mpox, avoid contact with sick or dead animals, and ensure meat is thoroughly cooked before consumption
- Use condoms as a precaution for 12 weeks (3 months) after recovery from mpox

2

### Awareness and Communication

- Know the signs and symptoms of mpox and how it spreads
- Communicate openly with close contacts about any symptoms if the virus is spreading in your area or community

3

### Health Management and Isolation

- Seek medical advice and isolate if you suspect you have mpox
- Isolate until fully recovered: Remain isolated until all lesions have crusted over, scabs have fallen off, and new skin has formed
- Follow local health guidelines on isolation and care at home or in a health facility

4

### Post exposure prophylaxis

- Get vaccinated following contact with infected persons



# Healthcare specific preventive measures for Mpox



## Some healthcare specific preventive measures include:

- Wear appropriate personal protective equipment when handling mpox patients
- Wash hands thoroughly before and after patient contact and after touching contaminated surfaces
- Adhere to infection prevention guidelines, including safe handling of sharps and waste disposal
- Regularly disinfect surfaces and medical equipment used by patients
- Properly dispose of contaminated materials like PPE and beddings



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# How Mpox Vaccine Works

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## How the Mpox vaccine works



- Monkeypox vaccines work by stimulating the immune system to recognize and combat the monkeypox virus
- There are currently two vaccines used for monkeypox prevention: MVA-BN (also known as Jynneos, Imvamune or Imvanex) and ACAM2000
- Both vaccines were originally developed for smallpox but have shown effectiveness against monkeypox due to the genetic similarity between the viruses
- These vaccines are recommended for individuals at high risk of exposure, such as close contacts of confirmed mpox cases or those in communities with ongoing outbreaks
- When administered, the vaccine stimulates the body's immune system to produce antibodies against the Monkeypox virus. These antibodies are essential for recognizing and fighting off the virus if you are exposed



# Types of Mpox vaccines



There are currently two types of Mpox vaccine that have been approved:

## 1 MVA –BN (JYNNEOS)

- **Type:** Third-generation, non-replicating, live attenuated vaccine based on Modified Vaccinia Ankara (MVA)
- **Safety Profile:** Well-tolerated with fewer side effects, making it the preferred choice for healthcare workers and high-risk populations
- **Indications:** Recommended for individuals at high risk of exposure, including healthcare workers, close contacts, and at-risk community members.
- **Manufactured by:** Bavarian Nordic

## 2 ACAM2000

- **Type:** Second-generation vaccine containing live vaccinia virus that replicates in humans
- **Safety Profile:** More side effects and contraindications compared to JYNNEOS, making it less commonly recommended
- **Indications:** Reserved for individuals at high risk where JYNNEOS is unavailable or contraindicated
- **Manufactured by:** Emergent Bio Solutions

- **Key considerations for healthcare workers:** The vaccine can also be administered after a person has been in contact with someone who has mpox (post-exposure prophylaxis). In these cases, the vaccine should be given less than 4 days after contact with someone who has mpox. The vaccine can be given for up to 14 days if the person has not developed symptoms



# Thank You



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# Section 2: Vaccination delivery strategy

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**Amos Godspower**



# Vaccination Strategy



- The vaccination strategy for this phase of vaccination is “Ring Vaccination” – this implies precision with vaccination targets ( identify based on criteria)and their networks.
- The target group for vaccination in this phase are:
  - **Close contact of confirmed Mpox cases ( within 42 days of infection of primary case)**
  - **Health workers ( including laboratory and Support staff especially at infectious disease treatment centres)**
  - **Key populations with high risk of acquiring the disease ( HIV infected persons, MSMs etc.)**
- It is essential that the target populations are linelisted and properly engaged prior to vaccination.



# Vaccination team composition

- Two (2) categories of vaccination teams will be utilized: Fixed site team and Special team
- A fixed Site team: are teams that remain in designated health facilities to provide vaccination services
- Special teams are mobile and provide vaccination to target populations that have not reported to the health facility
- The fixed team is composed of 3 members - 1 vaccinator, 1 recorder, 1 mobilizer
- Special team is composed of 3 members – 1 vaccinator, 1 recorder, 1 mobilizer
- Each state is allotted Three (3) teams to carry out the Mpox vaccination over a period of 10 days



# Criteria for team selection

	Team member	Criteria
	Vaccinator	<ol style="list-style-type: none"><li>1. Must be a health worker licensed to give injections</li><li>2. 18 years and above</li><li>3. Experience with giving vaccination is an advantage</li></ol>
	Recorder	<ol style="list-style-type: none"><li>1. 18 years and above</li><li>2. Ability to read and write</li><li>3. Ability to communicate in English and the local language</li></ol>
	Mobilizer	<ol style="list-style-type: none"><li>1. Must be above 18 years of age</li><li>2. Ability to engage with target audience</li><li>3. Experience engaging target population is an added advantage</li></ol>



# Vaccination Site and Target population priorities

The Proposed vaccination sites to reach the target populations are:

- a. Infectious Disease (Mpox) treatment or referral facilities
- b. ART clinics
- c. Areas where priority groups for vaccination can be found (e.g special meeting sessions etc.).

It is expected that **NOT** more than 2 fixed sites are selected and special teams are attached to the fixed sites.

The priority populations for preventive Mpox vaccination are

1. Close contacts of confirmed Mpox cases
2. Health workers ( working at IDH, Laboratory staff etc.)
3. Persons with low immunity status
4. Person with high-risk sexual behavior

**Vaccination is for persons 18 years and above in this instance**



# Vaccine administration



- It is a 2 dose regimen vaccine ( 2<sup>nd</sup> dose 28 days after the 1<sup>st</sup> dose)
- Route of administration: the Jynneos vaccine is administered subcutaneously in the **left upper arm**
- Subcutaneously – angle 45<sup>0</sup> over the Deltoid Muscle
- After administration, client to sit and be observed for at least 15 mins for AEFI before leaving vaccination site
- 10 days Implementation for each phase



# Roles and Responsibilities



	Role	Responsibility
1	<b>Vaccinator</b>	<ol style="list-style-type: none"><li>1. Observe Infection, Prevention and control protocols/ SOPs</li><li>2. Screen and educate client using key messages</li><li>3. Vaccinate and tally client</li><li>4. Observe for AEFI</li><li>5. Collation and transmission of data to the LIO</li><li>6. Collect and return vaccination materials to the LCCO</li><li>7. The most senior vaccinator is the Supervisor(fixed team)</li><li>8. Set up vaccination site</li></ol>
2	<b>Recorder</b>	<ol style="list-style-type: none"><li>1. Fill the vaccination card for the vaccinated client</li><li>2. Record the vaccination in the Mpox vaccination register</li><li>3. Remind client to return for the second dose and bring along their vaccination card.</li></ol>
3	<b>Mobilizer</b>	<ol style="list-style-type: none"><li>1. Ensure adherence to Infection Prevention and Control measures.</li><li>2. Conduct temperature checks at the point of entrance.</li><li>3. Ensure the orderly flow of clients at the vaccination sites.</li><li>4. Participate in sensitization and dialogue meetings</li></ol>



### Pre - Implementation

- Conduct stakeholder engagements with priority groups/ targets for vaccination to secure buy-in and support **including line listing eligible targets**
- Orientation of vaccination team on strategy and Interpersonal skill for vaccination of the priority groups.
- Quantify and deploy vaccine and other materials requirements to vaccination post/site
- **Ensure availability of additional resources at the vaccination post (job aids, IEC materials, etc)**



**Implementation activities** includes daily routine activities in relation to the vaccination of clients



## Implementation

- Continued engagements with priority groups/ targets to ensure they receive the vaccines
- Check all materials for vaccination every morning before setting up or setting out.
- Remind Clients to report to the health centre / vaccination site on their due date for the second dose of Mpox vaccine (28 days after first dose).
- **Conduct an accountability check for vaccines and all materials after each session**



**Post Implementation** includes daily routine activities in relation to the vaccination of clients



## Post - Implementation

- Continued engagements with priority groups/ targets to ensure they report AEFI and keep the date for their next dose in view
- Ensure all relevant data and materials have been checked and returned to the appropriate place or person.
- Surveillance activities are continued and strengthened.



# Key things to note



- A team is made up of vaccinator, Recorder and mobilizer
- Line listing clients before vaccination is a key step in Mpox vaccination.
- It is not a mass vaccination campaign but targeted.
- Ensure transmission of key messages to groups and informed consent
- The vaccine is a two-dose vaccine given 28 days apart.
- It is VERY essential to follow up clients to complete their second dose after 28 days



*Thank  
you*



# National Primary Health Care Development Agency



# MPOX Vaccine Introduction Training guide



November, 2024

NATIONAL PRIMARY HEALTH CARE DEVELOPMENT AGENCY



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# Section 2: Vaccines and logistics

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**Perewari Preye Otizara/Aigbokhan A.G.**



# Presentation Outline

Objectives

Expected Outcomes

Characteristics and Handling of **Jynneos (Mpox) vaccine**

Forecasting of **Jynneos (Mpox) vaccine**, Devices, PPE and CCE needs

**Jynneos (Mpox) vaccine** Storage, Transportation and Contingency Plan

Vaccine Accountability, Traceability and Reverse Logistics

TOR for the Vaccine Accountability Officers

Waste Management



# Objectives



To build the capacity and knowledge of participants on:

1

The characteristics and handling of Jynneos (Mpox) vaccine

2

Requirement for Jynneos (Mpox) vaccine, devices, CCE and PPE

3

Receiving, storing, transporting Jynneos (Mpox) vaccine

4

Contingency Plans for Storage of Jynneos (Mpox) vaccine to ensure the maintenance of potency up to point of administration

5

Implementation of vaccine accountability, traceability, reverse logistics and waste management of Jynneos (Mpox) vaccines at all iSC levels



# Expected Outcomes



At the end of the session participants should be able to:



Understand the characteristics and handling of the **Jynneos (Mpox) vaccine**



Estimate **Jynneos (Mpox) vaccine**, devices, CCE and PPE requirement for the vaccine introduction campaign



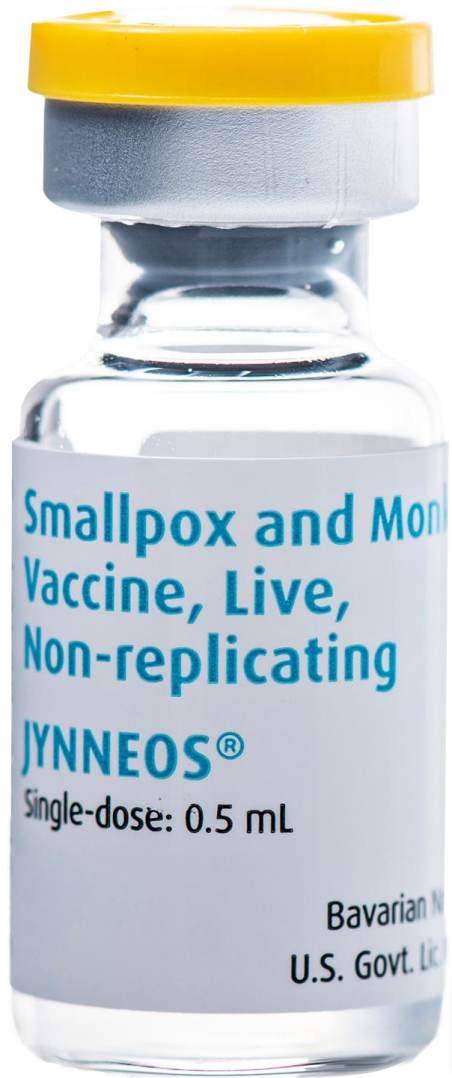
Properly receive, store and transport **Jynneos (Mpox) vaccine**



Implement the contingency plan to ensure the potency is maintained up to the point of administration



Implement Vaccine Accountability, Traceability, Reverse Logistics and Waste Management for **Jynneos (Mpox) vaccine** at all levels of the iSC








# CHARACTERISTICS AND HANDLING OF JYNNEOS (MPOX) VACCINE

Please Note\* the JYNNEOS (MPOX) VACCINE is also known as MVA-BN, i.e. Modified Vaccinia Ankara – Bavarian Nordic



# Characteristics of Jynneos (MPox) vaccine (2/2)

Focus	Details
 <b>Number of Doses/Vial</b>	<ul style="list-style-type: none"><li>1 doses per vial</li></ul>
 <b>Schedule</b>	<ul style="list-style-type: none"><li>2 (Two) doses (0.5 mL each) 4 weeks (28days) apart.</li></ul>
 <b>Storage</b>	<ul style="list-style-type: none"><li>Store in freezer between -25°C to -15°C up to expiration date (Oct-2025 for this donated batch).</li><li>Vaccine can be maintained at +2°C to +8°C for up to "12 hours" (thaw only before administration)</li><li><b>Thawed Jynneos Vaccine cannot be refrozen</b></li></ul>
 <b>Appearance</b>	<ul style="list-style-type: none"><li>When thawed, JYNNEOS is a milky, light yellow to pale white coloured suspension</li><li>Prior to administration, vaccine vial should be inspected for presence of particulate matter and discoloration. Vaccine "<b>SHOULD NOT</b>" be administered if present</li></ul>
 <b>Administration</b>	<ul style="list-style-type: none"><li>Administered via subcutaneous route in the upper arm over the deltoid muscle using 0.5ml syringe</li></ul>

Please Note that the Jynneos (MPox) vaccine does not have a Vaccine Vial Monitor (VVM) hence strict temperature monitoring must be observed !



# Handling of Jynneos (Mpox) vaccine (1/2)



- The vaccines must be stored in WHO PQS Freezers equipped with a Remote Temperature Monitoring Device (RTMD) at all levels of the supply chain to maintain the temperature between  $-25^{\circ}\text{C}$  to  $-15^{\circ}\text{C}$ .
- The temperature must be taken and charted twice daily, i.e. at beginning and close of work including weekends and public holidays at all levels of iSC
- Before administration, allow the vaccine to thaw and reach room temperature before use. The time the vaccine thawed must be noted and written on the vial
- During administration, the vaccine must be maintained at a temperature range of  $+2^{\circ}\text{C}$  to  $+8^{\circ}\text{C}$  using conditioned ice packs and slit foam
- Before administering a dose of the vaccine, swirl the vial gently in an upright position for at least 30 seconds.
- Use a sterile needle and syringe to extract 0.5ml from the single-dose vial





# Handling of Jynneos (Mpox) vaccine (2/2)



## National Level

- The vaccine is stored in Walk-In-Freezer-Room (WIFR) at between -25°C and -15°C up to the expiration date

## State Level

- The vaccine is stored in a **Solar Direct Drive (SDD) Freezer (TCW2043SDD)** at between -25°C and -15°C up to expiration date (Site must be proximal to the designated vaccination site)

## Service Delivery Level

- **Where there is a Solar Direct Drive (SDD) Freezer (TCW2043SDD)** the vaccine is stored at between -25°C and -15°C up to expiration date
- **Where there is “NO” SDD** vaccine not stored rather, only the specific no of vials for scheduled clients are to be transported by the Ward Focal Person (WFP) using conditioned ice packs. If still frozen (from state level delivery), it must be thawed at room temperature before administration.
- Once thawed at +2°C to +8°C the vaccine must be administered with 12 hours

Please Note that any vial of Jynneos (MPox) vaccine taken out of the CCE at -25°C and -15°C for vaccine administration cannot be returned back to the CCE



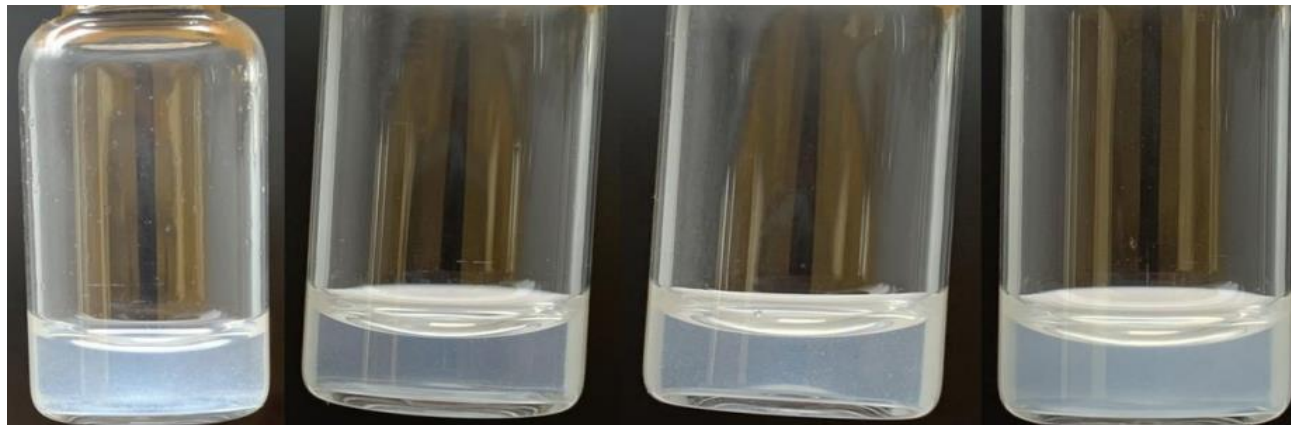
# Appearance of Jynneos (Mpox) vaccine

Examples of normal appearance of MVA-BN of different age in comparison to a water sample (right side, without yellow cap) in front of a black (top) and white (bottom) background.

Comparison of a vial containing water (left) and MVA-BN (right)



The pictures below show examples of normal appearance of the MVA-BN (JYNNEOS) in terms of degree and appearance of particles that are observed.<sup>2</sup> The particles are more noticeable when viewed in front of a black background

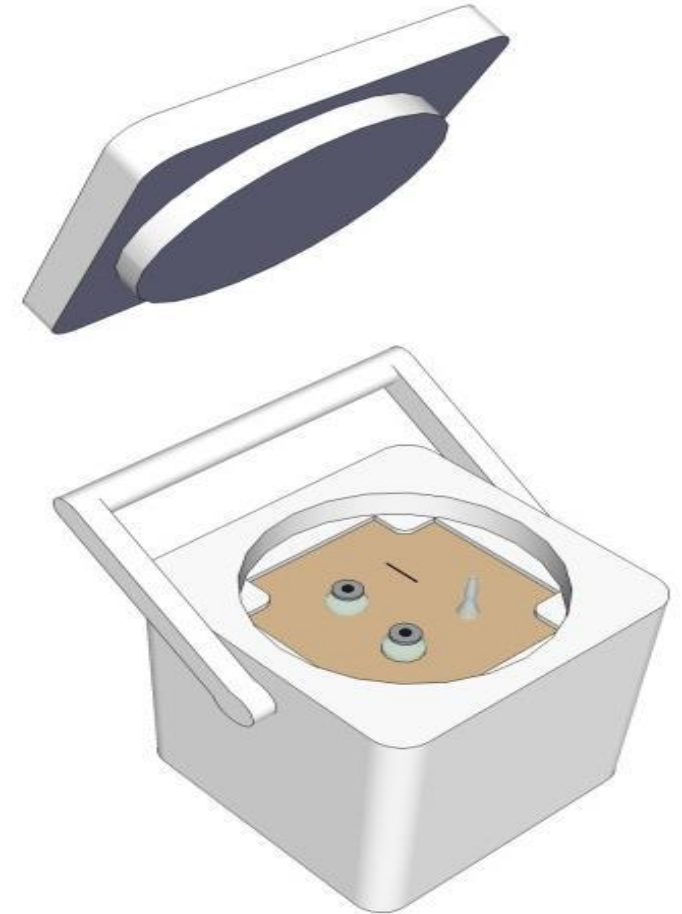




# Securing Jynneos (Mpox) vaccine during sessions



- 1 Conduct vaccination in a shaded area
- 2 The vaccine carrier must remain closed and loaded with conditioned ice packs at +2 °C to +8°C throughout the process of immunization
- 3 Use the foam pad with slits above the vaccine carrier for vaccine vials before administration.





# FORECASTING FOR Mpox VACCINES AND DEVICES, CCE AND PPE REQUIREMENTS



# Forecasting of Mpox Vaccine, Devices, CCE and PPE Requirements



## What is Forecasting?

- Forecasting is estimating the quantity of vaccines (doses), injection devices, cold chain equipment, and Personal Protective Equipment (PPE) required for a population over a specified supply period.
- Forecasting should ensure that the right quantities of bundled vaccines are estimated, adequately and timely supplied in good and acceptable quality at all levels.
  - ✓ National,
  - ✓ State
  - ✓ Service Delivery Point



# Forecasting of Mpox Vaccine, Devices, CCE and PPE Requirements



## Forecasting Parameters:

- Target population
- Doses per schedule
- Wastage rate

Calculation of Wastage Factor =  $100 / (100 - \text{wastage rate})$

**Calculation of Vaccine Requirements based on Target Population method.**

$$\begin{array}{ccccccc}
 \text{Target} & & \# \text{ of doses} & & \text{Wastage} & & \text{Total doses} \\
 \text{Population} & \times & \text{on the} & \times & \text{factor} & = & \text{Required} \\
 \text{(PT)} & & \text{schedule} & & \text{(Wf)} & & \\
 & & \text{(Dn)} & & & & 
 \end{array}$$



# Estimating Mpox Vaccine Requirements using target population method



**Example:** Assuming the target population of a PHC is 500 persons, number of doses per schedule is 2, and expected Wastage rate is **5%** .

Calculate the quantity of *Mpox vaccines* required.

**Calculation of Wastage Factor:**  $100 / (100 - \text{wastage rate (5\%)}) = 100 / (100 - 5) = 100 / 95 = 1.05$

Target Population (PT)	x	# of doses on the schedule (Dn)	x	Wastage factor (Wf)	=	Total doses required
<b>500</b>	<b>x</b>	<b>2</b>	<b>x</b>	<b>1.05 (Wr 5%)</b>	<b>=</b>	<b>1,050</b>

Number of Vaccine vials required are as follows for a given Service Delivery Point:

$$500 \times 2 \times 1.05 = 1,050 \text{ doses Required by the Service Delivery Point}$$

The vaccine is a single doses per vial, which means each vail is administer to an individual, therefore: **1,050 doses = 1,050 vials**



# Calculating Devices (AD Syringes & Safety Box) Requirement...

**Example:** To calculate devices requirement for the Jynneos Mpox vaccines in the aforementioned example

- Where; Target population = 500 persons, Number of doses per schedule=2 and Wastage Rate for devices = 5%.
- With a wastage rate of 5%, the Wastage Factor =  $100 / (100 - \text{wastage rate}) = 100 / (100 - 5) = 100 / 95 = 1.05$

## Calculation for AD syringes required

- **Number of AD syringes** = No. of vaccine doses (for the Mpox vaccine)

$$500 \times 2 \times 1.05 = \mathbf{1,050 \text{ AD syringes (0.5ml) required}}$$

- **Calculations for Safety Box Required**

$$\begin{aligned} & \text{Number of AD (0.5ml) syringes/100} \\ & = 1,050 / 100 = 10.5 \text{ (11 Pcs)} \\ & \mathbf{11 \text{ Pcs of Safety Box required}} \end{aligned}$$



# Calculation for PPE and CCE Requirements



## **PPE Requirement:**

- Pack of face masks required = (No. of teams x No. of persons per team x No. of days of implementation) / 50
- Hand Sanitizer (250 ml) Needed = No. of teams x No. of persons per team

## **CCE Requirement:**

- Vaccine Carriers requirements (Gio' Style) = No. of Teams x 2
- Ice packs requirements during vaccination = No. of Teams x 2 x 4
- **Cold Chain Storage Capacity requirement at LGA and HF levels**  
= Total number of Doses x Packed Volume per Dose
- **Packed Volume per Dose for Mpox vaccine =**



# Passive CCE types, capacity, and coolant requirements



Vaccine containers	Company Name	Manufacturer's ref	Vaccine storage volume (L)	No of coolant Packs	Coolant Pack Model (L) size
Large Cold box	B Medical System	RCW25	20	24	0.6
	BLOWKING	BK VC 2.6 CF	2.6	4	0.6
Vaccine Carriers	BLOWKING	BK VC 1.7 CF	1.7	4	0.3/0.4
	BLOWKING	VDC 24-CF	0.9	2	0.3/0.4

*Note: Refer to instruction label on the CCE*



# TRANSPORTATION OF Mpox VACCINES



# Transportation of Vaccine



## Transporting the vaccines

- Transport vaccines only inside the passenger compartment of a passenger vehicle (not in the trunk or the bed of a truck, which may be too hot or too cold).
- Move transport containers directly into a vehicle that is already at a comfortable temperature.
- Secure transport containers (brace or strap them) to prevent unnecessary movement.
- Keep containers out of direct sunlight.
- Never leave the container unattended in the vehicle.



# Transportation of JYNNEOS Mpox vaccines

- The Vaccine distribution to the Service Delivery Point will be strictly based on the target population to be immunized
- These vaccines will be transported at a temperature range of  $-25^{\circ}\text{C}$  to  $-15^{\circ}\text{C}$  from National to States using Cold Boxes, Frozen Gel Packs and RTMDs, and subsequently from States Cold Store to Service Delivery Point using Cold box at  $-25^{\circ}\text{C}$  to  $-15^{\circ}\text{C}$  if the facility is equipped with SDD Freezer **“OR”** at  $+2^{\circ}\text{C}$  to  $+8^{\circ}\text{C}$  (for same day administration) using Geostyle<sup>®</sup> if the facility is Unequipped
- At the Service delivery Point, the vaccine can be stored at a temperature range of between  $-25^{\circ}\text{C}$  to  $-15^{\circ}\text{C}$  **“ONLY”** where the Health Facility is equipped with SDD Freezer



# Contingency Plans for Storage of Jynneos Mpox vaccine 1/3



- Based on the temperature sensitivity specific to this donated batch of vaccines (i.e. the **12 hour** window to utilize when thawed at +2°C to +8°C after which it must be discarded), the vaccine transportation & storage strategy was deliberately developed with contingency measures in place to mitigate against closed vial wastage from storage conditions.

## **Measures in place include:**

- ✓ Utilization of Solar Direct Drive (SDD) for vaccine storage at the State Level
- ✓ Utilization of Remote Temperature Monitoring Devices in-transit and in the CCE at the storage point (Freezer: Portable CCE)
- Despite this elaborate strategy, **vaccine handlers** at the designated storage points in the State are expected to "**closely monitor the storage temperature of vaccines**" to trigger further contingency measures in case of any potential temperature excursion.



# Contingency Plans for Storage of Jynneos Mpox vaccine (SCS) 2/3



**USE THIS PLAN IN THE EVENT OF POWER OUTAGE/ELECTRICAL DISRUPTION "OR" PORTABLE COLD CHAIN EQUIPMENT MALFUNCTION**



## HAVE A PLAN READY

- Have a Primary back-up SDD Freezer (empty) **powered and running** optimally
- Have enough insulated cold Boxes (B-Medical RCW 25), frozen gel packs and Remote Temperature Monitoring Devices (Figorr Motes) for temporary vaccine storage and or transport.
- Bake and store enough **"gel icepacks" in a freezer at -25°C**
- Identify a secondary (alternate) storage site in case of prolonged equipment downtime. The proximal site ("Onsite" or "Contiguous" to Storage Site) must have the recommended equipment such as WHO PQS WIFR/Chest Freezer/SDD Freezer

## HAVE DESIGNATED 24HRS/7DAYS EMERGENCY CONTACTS PERSONS DETAILS

Primary emergency contact name and number: State or designated Technician/SIO/SCCO  
 Secondary emergency contact name and number: ES/DPH  
 Tertiary emergency contacts: NPHCDA RRT, NSCS Resident Engineer, Head Operations, DLHC

Key



Flow of events

The SDD Freezer will be monitored remotely, and email/SMS alerts will be sent to emergency contacts .

- Primary contact at **-22°C**
- Secondary contact at **-20°C**
- Tertiary contact at **-18°C**



**1** Ensure 24/7 physical presence of designated personnel at the site where the SDD Freezer is installed to ensure the equipment's temperature is maintained between -25°C to -15°C .

**2** An RTMD will be inserted in all SDD Freezers to remotely monitor the temperature of the vaccines to trigger proactive corrective measures. If power or cooling is disrupted, **The RTMD inserted in the SDD Freezer will send an automatic alert if the temperature goes below or above the set Threshold i.e > -25°C or < -22°C**  
 The designated staff will:

- Power the back-up generator or preferably the Automatic Transfer Switch (ATS) where applicable will be activated.
- Troubleshoot SDD Freezer to ascertain if equipment downtime has been resolved



**3** If the power outage/equipment malfunction persist and cannot be resolved, the on site staff immediately moves vaccine as per protocol

**3a** If secondary (alternate) storage site is located "onsite" i.e. within the State Cold Store Facility: Immediately physically carry the SDD Freezer to the location of the WHO PQS WIFR/Chest Freezer/SDD Freezer and transfer the vaccines for safe storage.

**3b** If secondary (alternate) storage site is located "offsite": Immediately transfer Vaccines to pre-positioned insulated cold Box(es) (B-Medical RCW 25), using frozen gel packs equipped with RTMD(s) for temporary vaccine storage and promptly transport to alternate storage site with available WHO PQS WIFR/Chest Freezer/SDD Freezer

Implement "a" or "b"



# Contingency Plans for Storage of Jynneos Mpox vaccine (SCS/SDP) 3/3



**USE THIS PLAN IN THE EVENT OF POWER OUTAGE/ELECTRICAL DISRUPTION “OR” WIFR/CHEST FREEZER/SDD MALFUNCTION**



## HAVE A PLAN READY

- Monitoring Devices (Figorr Motes) for temporary vaccine storage and or transport.
- Bake and store enough “gel icepacks” in a freezer at **-25°C**
- Identify a secondary (alternate) storage site in case of prolonged equipment downtime. The proximal site (“Onsite” or “Contiguous” to Storage Site) must have the recommended equipment such as WHO PQS WIFR/Chest Freezer/SDD Freezer

## HAVE DESIGNATED 24HRS/7DAYS EMERGENCY CONTACTS PERSONS DETAILS

Primary emergency contact name and number: State or designated Technician/SIO/SCCO

Secondary emergency contact name and number: ES/DPH

Tertiary emergency contacts: NPHCDA RRT, NSCS Resident Engineer, Head Operations, DLHC

Key

→ Flow of events



1

**Ensure 24/7 physical presence of designated personnel** at the site where the WHO PQS WIFR/Chest Freezer/SDD Freezer is installed to ensure the equipment's temperature is maintained between -25°C to -15°C .

2

An RTMD will be inserted in all WHO PQS WIFR/Chest Freezer/SDD Freezer to remotely monitor the temperature of the vaccines to trigger proactive corrective measures.

If power or cooling is disrupted, **The RTMD inserted in the SDD Freezer will send an automatic alert if the temperature goes below or above** the set Threshold i.e **> -25°C** or **< -22°C**

The designated staff will:

- Where applicable, Power the back-up generator or preferably the Automatic Transfer Switch (ATS) will be activated.
- Troubleshoot **WHO PQS WIFR/Chest Freezer/SDD** Freezer to ascertain if equipment downtime has or can be resolved

3



If the power outage/equipment malfunction persist and cannot be resolved, the on site staff immediately moves vaccine as per protocol

3

**a** If secondary (alternate) storage site is located “onsite” i.e. within the storage facility: Where applicable, Immediately transfer the vaccines into the pre-positioned vaccine carrier (Giostyle®) with appropriate gel packs onwards to the WHO PQS WIFR/Chest Freezer/SDD Freezer for safe storage.

3

**b** If secondary (alternate) storage site is located “offsite”: Immediately transfer Vaccines to pre-positioned insulated cold Box(es) (B-Medical RCW 25), using frozen gel packs equipped with RTMD(s) for temporary vaccine storage and promptly transport to alternate storage site with available WHO PQS WIFR/Chest Freezer/SDD Freezer

Implement “a” or “b”



# Vaccine accountability, Traceability , Reverse Logistics and waste Management



# Vaccine accountability, Traceability and Reverse Logistics (1/2)



- Vaccines will be issued by batch numbers and clearly documented at both issuing and receiving stores
- Vaccine Accountability Officers (VAOs) i.e. SCCOs & Ward Focal Persons (WFP) will be appointed at the following levels of iSC – State, and Service Delivery Point, with clear TORs to support Vaccine accountability.
- The VAOs will keep records of quantities and batch numbers of vaccines (and other commodities) and ensure physical count of all returned vials, both opened and unopened (reverse logistics).
- The VAOs will also review data on issuance, receipt and utilization of vaccines daily



# Vaccine Accountability, Traceability and Reverse Logistics (2/2)



- **Reverse logistics** accounts for usable, unusable, punctured vials, and filled Safety Boxes from the vaccination points to the State Cold Store and ensures that all the vaccines can be **traced** using the batch numbers if the need arises.
- For “**equipped facilities**” where vaccine are stored the Service Delivery Point All empty, unusable, and usable vials will be evacuated to the State within 48hrs after the completion of the campaign, in a **reverse order**.
- For “**unequipped facilities**” where vaccine are delivered on need basis based on scheduled clients, all empty, unusable, and usable vials will be evacuated to the State on the same day following the vaccination session, in a reverse order.
- The **empty and unusable vaccine vials** will be quarantined at the State Cold Store (SCS) and destroyed at the State level by **boil, crush, bury and encapsulation**, while used syringes in **filled safety boxes** isolated at holding point at the SCS will be **incinerated** at designated sites. *Waste management will be concluded within two weeks of the vaccination exercise.*



# TOR for the Vaccine Accountability Officers (State & Service Delivery Point level)



**The SCCOs and the Ward Focal Person will be the Vaccine Accountability Officers**

**Vaccine Accountability Officer (VAO)** will be responsible for:

1. Recording of all Jynneos Mpox vaccine issued to the State/Service Delivery Point by batch number and other characteristics
2. Documenting the specific batches issued to each State/Service Delivery Point site and review the **ODK** download State/Service Delivery Point to ensure quantity and batches received corresponds with what were issued within 24 hours of receipt.
3. Facilitating and providing guidance on selection, training, and overall guidance to Service Delivery Point Vaccine Accountability Officers (VAO).
4. Ensuring availability of Vaccine Accountability tools (Paper based and ODK)
5. Conducting a physical count of all the returned vials (open and unopened) and ensure the records, including batch numbers tally with the issues
6. Harmonize state vaccine accountability records and follow up with facilities where discrepancies may arise.



# TOR for the Vaccine Accountability Officers (Ward level )



1. Each day the WVAO (WFP) records details of all vials given to each team (number of vials, batch number of each vial, team codes, the name, phone number of the team supervisor and name of the health facility) in the ward Vaccine Accountability forms/ODK platform
2. At the end of each day, each vaccination site supervisor **MUST** return all used and unused vials to the WVAO
3. The WVAO checks and compares all vials returned with the recorded details (number of vials received against returned, batch numbers of vials, team codes (where applicable), etc.)
4. If details match, team Supervisor signs off for the day (hard copy) and the WVAO reconciles the data and upload the ODK records.
5. The summary (hard copy) is then returned to the State Cold Store
6. The WVAO **MUST** also reconcile number of clients immunized with the number of doses/vials used before transmitting data to the State/ODK Platform
7. The WVAO should also liaise with SCCO to understand the ward (HF) daily vaccine distribution plan.
8. WVAO should give daily feed back to the State VAO (SCCO)



# Waste Management(1/2)



- Waste Management Committees (WMCs) will be reactivated at the **State, LGA and Ward** levels with clear TORs.
- The WMCs will develop waste management plans, suitable for their areas of responsibility
- The committees will be responsible for:
  - Identification of incineration facilities in the state
  - Identification of collection/holding points for wastes,
  - Proper documentation of wastes collected, especially for sharps
  - Designing an efficient waste transportation system where required,
  - Mobilization of required resources for waste management
  - Monitoring of waste management practices



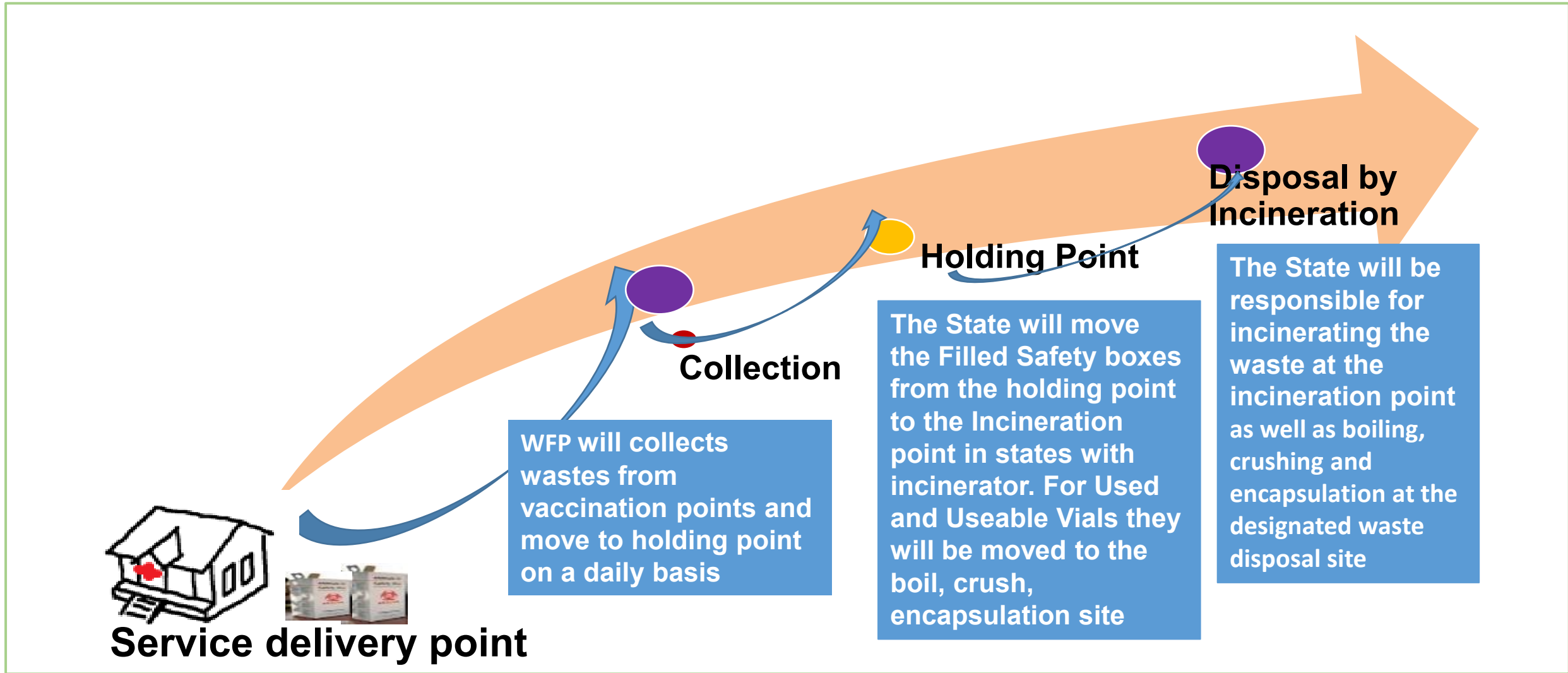
# Waste Management(2)



- At the end of each daily vaccination session, all empty, unusable, and unopened vials will be retrieved and quarantined at the state cold stores.
- Filled safety boxes will be retrieved and quarantined at the LGA holding point for further waste management procedures.
- All empty/unusable vials will be retrieved for boiling, crushing, burying and encapsulation at state level.
- All filled safety boxes will be retrieved to the incineration sites for incineration.



# Mpox Vaccine: Waste Disposal Management Flow

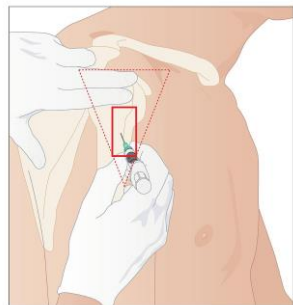




# Questions



# Thank You





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# Section 4: Risk Communication & Community Engagement/Demand Generation

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Okechukwu Christian & Jacqueline Angaye



# Expected Outcome



**At the end of the session participants should be able to:**



State the risk communication and demand generation strategies and key activities for mpox targeted vaccination



Understand the National Advocacy, Communication & Social Mobilization (ACSM) TWG and its operationalization



Identify opportunities for leveraging existing community mobilization and engagement structures to drive demand for mpox vaccine



Understand the roles and responsibilities of ACSM members at national and sub-national levels.



# Communication Context



- Vaccine hesitancy from target groups during vaccination rollout has been a major cause of concern. For example, misinformation and disinformation resulted in rumors and misconceptions on the Mpox vaccine and distrust in government and its institutions.
- Major concerns reported are around vaccine safety and efficacy, prioritization of target population, and equity in vaccine distribution.
- To address concerns regarding the mpox vaccine, improve vaccine acceptance and drive demand generation, based on the limited amount of vaccines currently available, the recommended activities to reach the audience are through interpersonal communication via one-on-one meetings and small group engagements in health facilities and communities.
- The National Advocacy, Communication & Social Mobilization (ACSM) TWG will coordinate all ACSM activities at the national and sub-national level throughout the deployment period.





# Rationale



Drivers of “vaccine confidence” include trust in the safety of the vaccine and trust in the institutions tasked with safety and safe roll out.

Mpox vaccine introduction messages need to be clear on:

- Safety
- How to access the vaccine
- Why they need the vaccine

There are a lot of false claims and misinformation, particularly on social media platforms but also on other channels, and these are gaining traction.

If people become less confident in official sources of information, they are more susceptible to further mis/ disinformation and therefore vaccine hesitant.

We all need to work together to identify and address these threats to mpox vaccination at all levels of governance – and local communications are critical.



# The key messages to disseminate



## **Risk:**

- Mpox is a contagious disease that can affect anyone.
- Mpox is transmitted through close contact with persons infected with mpox or contact anything contaminated by their body fluids.
- The rash from mpox can be painful and unsightly. Other symptoms may include fever and swollen lymph nodes.
- Getting the mpox vaccine can protect persons who have weakened immune systems from severe illness and death.

## **Safety:**

- The mpox vaccine is free, safe and effective.
- The mpox vaccine is approved by World Health Organization (WHO) for emergency use and is NAFDAC authorized.
- The vaccine will be administered by a trained healthcare worker.

## **Accessibility:**

- The vaccine is available to eligible persons above 18 years of age.
- The mpox vaccine will be available in designated health facilities.
- Visit [www.nphcda.gov.ng](http://www.nphcda.gov.ng) or call the toll-free number **7722** for more information.



# Strategic approach for targeted mpox vaccination



# Strategic approach for targeted mpox vaccination to reduce hesitancy & generate demand for mpox vaccine



## Community engagement

- The vaccination team will focus on providing accurate information on the mpox vaccine, address any misconceptions/ misinformation and create demand for the mpox vaccine.
- The messaging will focus on eligible persons above 18 years of age, emphasizing those most at risk or close contacts of mpox cases.
- The messaging will be delivered via targeted engagements such as interpersonal communication via one-on-one meetings and small group engagements in health facilities and communities.
- Continuous evidence generation and community listening will guide all interventions and help address rumors/ misinformation.
- The National ACSM TWG will coordinate all ACSM/ RCCE activities at the national and sub-national levels in an emergency mode with proactive and rapid response/ interventions.



# Community Engagement





## Key Community Engagement Activities for mobilization for Mpox Vaccination

### Objectives:

1. To identify eligible individuals for mpox vaccination
2. To disseminate key messages on mpox vaccination
3. To address rumours and misinformation on mpox vaccination at facility and household level
4. To refer eligible persons to vaccination centres closest to the communities.

### Compound meetings

Targeted group meetings with contacts of confirmed mpox cases and at-risk groups, aged 18 years and above, via the vaccination team, CHIPS Agents, VCMs and other community resource groups. *They are to use counselling materials, e.g. **community dialogue** flipchart, and mpox vaccine leaflet for discussions, and use referral cards to refer to health facility.*

### House-to-house visits

Conduct routine visits with households of contacts of confirmed cases & at-risk groups, aged 18 and above. Community resource groups should use IPC skills to promptly respond to rumours, misinformation and disinformation on mpox vaccine by providing correct information about the vaccine. *They are to use the mpox posters, mpox vaccine HCW FAQ and mpox vaccine leaflet*

### Other Activities

- **Provide mpox posters in strategic locations** in the community, such as schools, palaces, residences of traditional and religious leaders, market places, health facilities, places of worship, etc.
- **Report rumours/AEFI:** All members of the vaccination team should report any rumours, AEFI or other issues to help state & LGA teams respond promptly.



## Targeted Engagement with Communities on Mpox Vaccination: *CHIPS Agents, VCMs, CORPS, other community resource persons orientation at the ward level should include:*



### How to engage

- (Where you are not known) Explain who you are, which organisation you come from and what you do in the community.
- Understand what people are saying: Listen first to what people have to say about mpox disease, the vaccine, before sharing what you know.
- Ask questions to make sure people understand you.
- Get the CEFP, WDC, traditional or religious leaders, community-based organisations, or to talk to people who are not willing to listen or follow advice.

### NOTE!!!

If asked about any AEFI, refer to the mpox HCW FAQ to provide basic answers.

When you are asked what you don't know, be honest and tell them you will find out and get back to them.

Don't spread rumours. Rather, pivot the discussion and provide the available factual information on mpox disease and the vaccine.

Do not cause panic, reassure people by talking positively about the benefits of mpox vaccination.

### Remember to:

- Start by learning their worries and what questions they have: record this on the reporting tool provided.
- Provide the right answers to the questions: use the mpox HCW FAQ and mpox leaflet.
- Provide information on where they can go and get vaccinated with the mpox vaccine.
- Document activities and report using the reporting tool ([insert link to reporting tool](#))



# What is the role of health worker to promote the mpox vaccination?





# Role of health worker in demand generation for mpox vaccination 1/2



- Sensitize clients on mpox vaccine: it is free, safe and effective
- Ensure voluntary willingness of the client to vaccinate against mpox
- Ensure strict confidentiality of the clients
- Communicate non-serious AEFI and serious AEFI and how to report and manage
- Promote public health & social measures, including handwashing, none sharing of beddings and utensils, physical distancing
- Identify and mobilize community resource groups for information dissemination on mpox
- Rumour management and community listening



# Role of health worker in demand generation for mpox vaccination 2/2



- Leverage **targeted** community meetings and religious platforms to sensitize the people on the benefits of mpox vaccination
- Use data from evidence generation streams to inform on the spot communication and advocacy for mpox vaccination
- Communication of and adherence to public health and social measures during and after vaccination
- Ensure the presence of SBC materials in facilities, vaccination sites, etc (mpox posters) and to intended audiences (mpox leaflets)
- Feedback to the state and LGA team on vaccine uptake rate, hesitancy and refusals
- Support ACSM activities and ensure smooth flow of vaccinations process



# IPC skills for the health worker





# IPC skills for the health worker



- Listen attentively to fears and concerns of clients
- Use simple and clear language
- Communicate in local language where necessary
- Answer questions and concerns accurately and politely
- Ensure smooth flow of vaccinations process
- Document community feedback including rumours during communication with clients





# How can a health worker effectively reduce mpox vaccine rumours, misinformation?





# Address myths, misconceptions and managing misinformation about mpox 1/2



## Defining Misinformation and Disinformation

- Misinformation is false information shared by people who do not intend to mislead others.
- Disinformation is false information deliberately created and disseminated with malicious intent.
- Both types can affect perception about mpox or any other disease prevention.
- Misinformation and disinformation that has circulated are mostly around safety, and effectiveness of vaccines.





# Address myths, misconceptions and managing misinformation about mpox 2/2



The first step to addressing misinformation about mpox in your community is learning more about it, including where it starts, when, why, and how it is spreading and evolving.

- Identify communities at risk.
- Understand what communities are thinking about mpox, and plan for potential solutions to increase awareness and address myths.
- Identify community and religious leaders, trusted messengers, and other important channels through which you can reach communities.
- Identify areas of intervention and prioritize potential intervention strategies to increase awareness about mpox infection and control measures.



# Rumour/misinformation management by the health worker



- Listen attentively to the client's concerns and fears to analyze misinformation circulating in your community
- Effectively communicate accurate information on mpox
- Share mpox vaccine leaflet with clients, and other SBC materials (posters, etc) containing mpox information
- Line list contacts for further engagement using relevant community structures
- Avoid arguments that may escalate. Rather pivot discussion to mpox facts
- Stay calm during communication as it is easier to convince a client





# How can a health worker address stigma to mpox clients?







# What is stigma?



- Stigma occurs when people associate a risk with a specific people, place, or thing
- Stigmatization is especially common in disease outbreaks
- In an outbreak, this may mean people are labeled, stereotyped, discriminated against, treated separately, and/or experience loss of status because of a perceived link with a disease
  
- Stigmatized groups may suffer psychologically and economically. They may be subjected to:
  - Social avoidance or rejection
  - Denial of healthcare, education, housing, or employment
  - Physical violence
  
- Stigmatized individuals may experience isolation, depression, anxiety, or public embarrassment
- Stigma hurts everyone by creating more fear or anger toward ordinary people instead of focusing on the disease that is causing the problem



# Why do people stigmatize others?



- People stigmatize others due to lack of knowledge.
- People stigmatize others due to fear of the unknown or fear of being affected.
- Stigma comes from the impulse to assign blame.
- Stigma comes from the impulse to dissociate with those affected, making a distinction between “*us*” (the uninfected) and “*them*” (the infected/most at-risk population)





# Why it is important to address stigma?



Stigma can further worsen the spread of a disease and cause negative health outcomes of public health emergencies by:

- forcing people to hide symptoms or illness
- stopping people from getting or seeking medical care
- preventing individuals from adopting healthy behaviours, and
- ***ultimately making it difficult to control the disease.***





# How to counter stigma during public health emergencies, e.g. mpox



- Maintain privacy and confidentiality of those seeking healthcare.
- Quickly communicate the risk or lack of risk from associations with products, people, and places.
- Raise awareness about mpox without increasing fear and share accurate information about how it spreads.
- Speak out against negative behaviours, including negative statements/images on social media about groups of people, or exclusion of people who pose no risk from regular activities.
- Engage with stigmatized groups in-person and through targeted group meetings.





*Thank  
you*



# National Primary Health Care Development Agency



## Data Collection Tools

**Ebipasu Eze-Sam**

# Background

## Data Tools:

Refer to systems, technologies, and methodologies designed to collect, manage, analyse, and report data related to immunization/vaccination programs

These tools are crucial for-

- Tracking vaccination coverage
- Monitoring vaccine-preventable diseases
- Ensuring vaccine safety, and
- Optimizing vaccine distribution

# Tally sheet

- This is a primary campaign data collection tool
- It is filled at the vaccination post by the vaccinator after every vaccination

**MONKEY POX VACCINATION 20..... NIGERIA**  
**TALLY SHEET FOR VACCINATION TEAMS**

Instruction: To be filled by the Vaccinator. Use a separate tally sheet each day

Tick as appropriate    Reactive     Preventive

State: \_\_\_\_\_ LGA: \_\_\_\_\_ Ward: \_\_\_\_\_

Health Facility Name/post: \_\_\_\_\_ Vaccination Team code: \_\_\_\_\_ Date: \_\_\_\_\_

Age Group	Settlement 1 Name: .....		Settlement 2 Name: .....		Settlement 3 Name: .....	
	Male	Female	Male	Female	Male	Female
18-24 Years	00000000	00000000	00000000	00000000	00000000	00000000
	00000000	00000000	00000000	00000000	00000000	00000000
	00000000	00000000	00000000	00000000	00000000	00000000
	00000000	00000000	00000000	00000000	00000000	00000000
Sub Total						
25-40 Years	00000000	00000000	00000000	00000000	00000000	00000000
	00000000	00000000	00000000	00000000	00000000	00000000
	00000000	00000000	00000000	00000000	00000000	00000000
	00000000	00000000	00000000	00000000	00000000	00000000
Sub Total						
41-50 Years	00000000	00000000	00000000	00000000	00000000	00000000
	00000000	00000000	00000000	00000000	00000000	00000000
	00000000	00000000	00000000	00000000	00000000	00000000
	00000000	00000000	00000000	00000000	00000000	00000000
Sub Total						
50 Years & Above	00000000	00000000	00000000	00000000	00000000	00000000
	00000000	00000000	00000000	00000000	00000000	00000000
	00000000	00000000	00000000	00000000	00000000	00000000
	00000000	00000000	00000000	00000000	00000000	00000000
Sub Total						
Total						

MATERIAL RECEIVED, USED AND RETURNED				
	Mpox (Vials) Vaccine	Syringes Auto	Safety Boxes	Vaccination Cards
1. Received				
2. Used &				
3. Returned				
4. Batch				

NUMBER OF AEFI CASES OBSERVED	
Serious	Non-Serious

Vaccination Post Supervisor Name/ Signature: \_\_\_\_\_

Has AEFI Reporting Form been completed for each adverse event following immunization? Yes  or No . Phone no \_\_\_\_\_



# Vaccination Register

- Used during the implementation stage of campaigns to collate daily vaccination data
- It is filled at the different vaccination post by the Team Supervisor/WFP
- Data collected is use to keep client vaccination details against subsequent visit

**This Should be after every vaccination!!!**



# Mpox Vaccination Exercise - NIGERIA

State level Tallysheet Summary

Instruction: To be filled by SIO Use one sheet for each day

State \_\_\_\_\_

LGAs Visited \_\_\_\_\_

Date \_\_\_\_\_

Round \_\_\_\_\_

Day \_\_\_\_\_

S/N	Vaccination team Codes	Total No. of people (Vaccinated)								Mpox (Vials)			AD Syringes			Safety Boxes			Vaccination Cards			No. of AEFI Cases Reported		
		Male				Female				Vaccine														
		(18- 24ys)	(25 - 40 yrs)	(41 - 50 yrs)	Over 50 years	(18- 24ys)	(25 - 40 yrs)	(41 - 50 yrs)	Over 50 years	TOTAL	Received	Used or Wastage	Returned	Received	Used or Wastage	Returned	Received	Used or Wastage	Returned	Received	Used or Wastage			Returned
1																								
2																								
3																								
4																								
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								
13																								
14																								
15																								
<b>Total</b>																								

Remarks:

Note: Copy of this form should be sent to the state team. The LGA should file a copy centrally for future reference.

*All sessions must be completed*

STF Name \_\_\_\_\_ Signature \_\_\_\_\_

# Daily Implementation Plan

- Daily implementation plan is a frame work for planning of daily events
- It serves as a guide during implementation, and it MUST be used by all vaccination teams
- A DIP is developed during MP and updated just before implementation starts.
- The Ward Focal person and Team supervisors are responsible for updating DIPs
- Other persons involved in updating DIPs include:
  - Community leader
  - Religious leaders
  - Market woman leaders
  - Youth organization leaders





# Summary of Data Tools

S/N	Data Set	Data Tool	Responsible	Frequency	Timeline
1	Tally sheet	Vaccination tally sheet	Vaccinator	After vaccination	Intra campaign
2	Daily Call-In Data	Call-in data template (Google Link)	SIO/SM&E	Daily	Implementation
3	Mpox Supervisory Checklist	ODK	Supervisors	Daily	Intra campaign
4	LGA Summary Sheet	Tally data	SIO/SM&E	Daily	Intra campaign

# THANK YOU





# Surveillance of Adverse Events Following Immunization with Mpox Vaccine



Dr Barine N. & Obele Juliet

November 2024



# Presentation Outline:

Objectives

Vaccine Safety Surveillance System

AEFI surveillance cycle

Basic concepts and definitions

Management of non-serious AEFI

Management of serious AEFI

AEFI flow chart

# OBJECTIVES OF THE MEETING

*At the end of the presentation participants will*

1

Have a better understanding of vaccine Safety Surveillance System

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2

Understand basic concepts of AEFI

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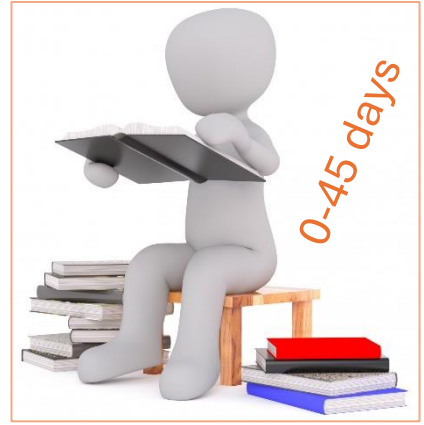
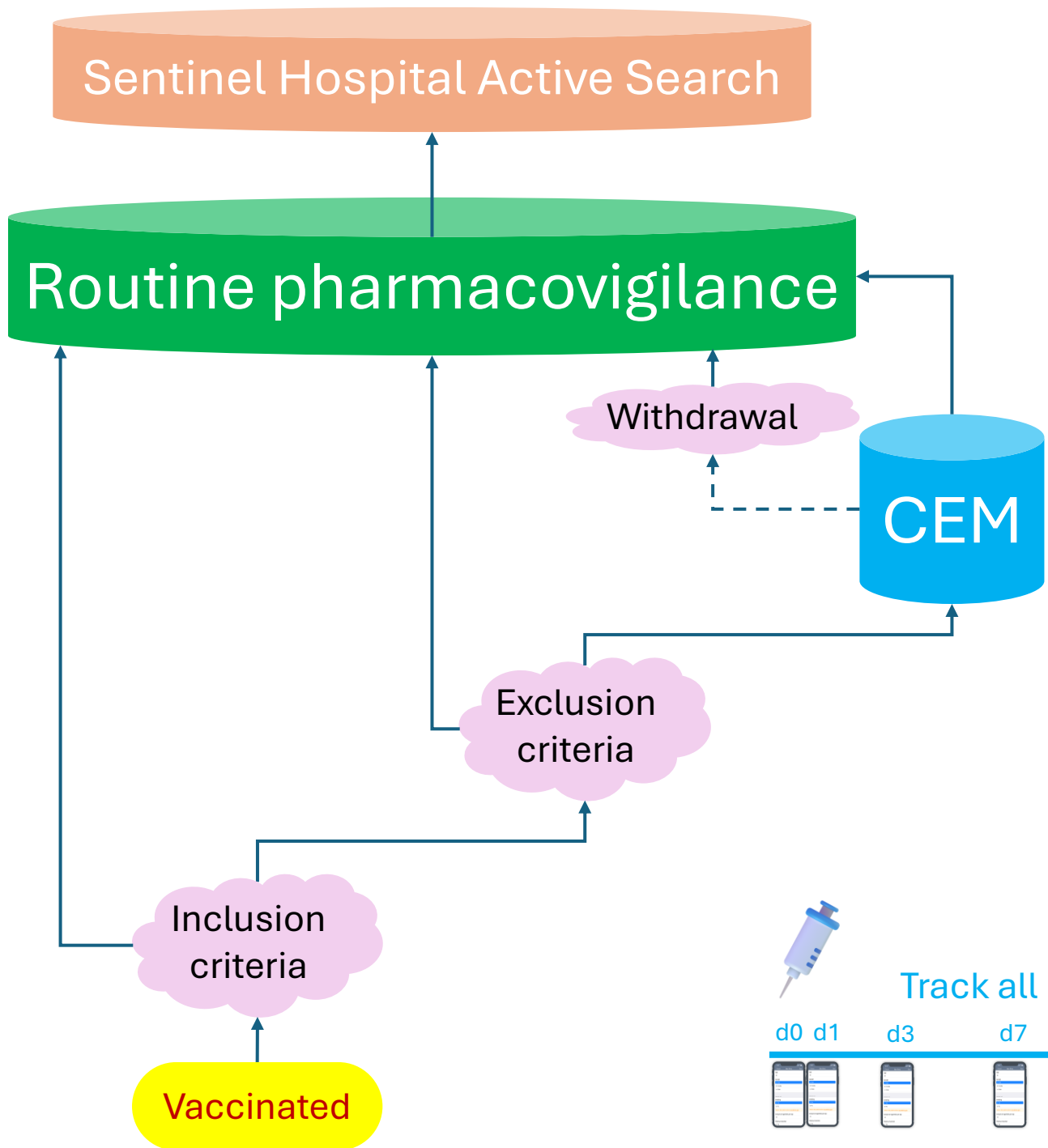
3

Be able to manage non serious and serious AEFI

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# Safety Surveillance System

Mpox Vaccine





# Cohort Event Monitoring

Enrol  
Record reactogenicity  
Follow up



Informed Consent

✓						
---	--	--	--	--	--	--

Fill ODK

✓		✓	✓	✓	✓	✓
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## Timelines for the CEM

Activity	Timeline
Ethical clearance	
Engagement of Key stakeholders (CSO) to recruit participants	
Engagement of Key stakeholders (CSO) to recruit participants	
Training of Clinicians, CSO, SE, State DSNO, NAFDAC officers and state focal person:	
Training of HCWs/Vaccinators/enrollers	
Enrolment/Follow up, per fully followed up:	
Monthly data harmonisation meeting:	
Quarterly Supervisory visit to CSO at their Site:	
National Data Analysis Meeting	
National Report writing and Dissemination:	

# Vaccine Safety Surveillance of the Mpox vaccine recipients

## Cohort Events Monitoring (CEM):

- Here, the person vaccinated from day 0 will be approached by an enroller who will inform them of the safety surveillance if he is willing to participate,
- The enrollee will sign a consent form and will also provide information on his prior conditions.
- A day after vaccination (day1) the enrollee will be called to see if he has any reactions (fever, pain at the site of injection. etc.).
- The enrollee will be called again on day 3, to monitor possible reactions again.
- Subsequently, the enrollees will be actively followed up until 5 weeks after each Mpox vaccine dose to see if they have visited any hospital. If a vaccinee visited a hospital for a condition other than accident, the hospital will be visited for collection of medical records and assessment. The file will be collected from the hospital and shared with the NEC for review, to determine if it is vaccine related.
- Enrollment of participants of participants will take place at each of the vaccination sites. Once the participant is enrolled, he will be followed up by house visits and/or phone calls.

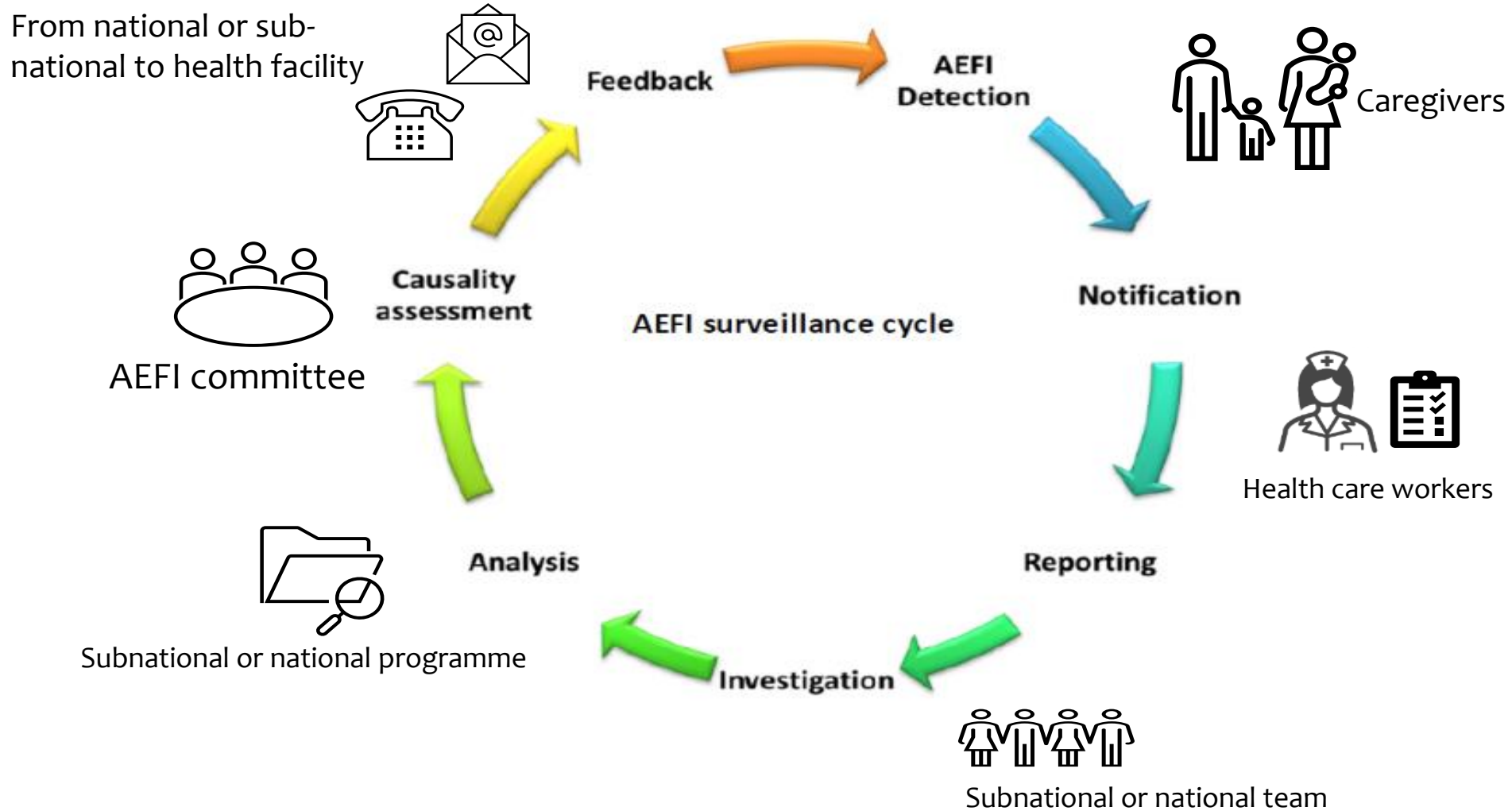
# Vaccine Safety Surveillance of the Mpox vaccine recipients

## Sentinel hospital active search:

- Selected hospitals will be regularly visited for screening of hospital registers in active search of defined Adverse Events of Special Interest (AESI).
- The screening for AESI will cover the vaccination dates up to the forty-fifth day after the last person vaccinated.
- The potential cases will be line listed based on signs and symptoms by a Nurse using the combination of signs and symptoms.
- This is followed by the ascertainment of the case by a clinician using the Brighton Collaboration's case definition. The data abstraction will be done by the Nurse after ascertainment by the clinician using electronic tool.
- Finally, the data will be analyzed by the NPHCDA and shared with the NAFDAC.



# AEFI Cycle and Key Players





# Basic Concepts and Definitions

An Adverse Event Following Immunization (AEFI) is any untoward medical occurrence which follows immunization, and which does not necessarily have a causal relationship with the usage of the vaccine.

There are two broad classifications of AEFI.

**1** Regulatory classification (Non serious AEFI and serious AEFI)

**2**

**Cause specific classification – Five Categories**

- *Vaccine Product related reaction, Vaccine quality defect related reaction, Immunization error related, Anxiety related reaction & Coincidental*

The adverse event may be any unfavorable, unintended sign, abnormal laboratory finding, or symptom or disease.



# Basic Concepts and Definitions:



## *Regulatory classification*

- **Non-Serious AEFIs**: An event that is not ‘serious’ and does not pose a potential risk to the health of the recipient (occurs within 2hrs of injection, resolves after a short period, poses little danger).

### Serious AEFIs

is defined as an event causing a potential risk to the health/life of a recipient leading to

- **Hospitalization** or prolongation of existing hospitalization (*e.g., encephalopathy, seizures, aseptic meningitis*)
- **Persistent or significant disability or incapacity** (*e.g., paralysis*)
- **Life-threatening**
- **Congenital Malformations**
- **Death**

- ‘**Serious**’ is not synonymous with ‘**severe**’ (i.e., intensity or severity of the event)

# Cause-specific classification of AEFI

	1 Vaccine product-related reaction	2 Vaccine quality defect-related reaction	3 Immunization error-related reaction	4 Immunization anxiety-related reaction	5 Coincidental event
AEFI DEFINITION	Caused or precipitated by a vaccine due to one or more of the inherent properties of the vaccine product	Caused by a vaccine due to 1 or more quality defects of the vaccine product including its administration device	Caused by inappropriate vaccine handling, prescribing, or administration	Arising from stress or anxiety about the immunization	Caused by something other than the vaccine product, immunization error, or immunization stress / anxiety
Example	Extensive swelling following DTP vaccination	Failure by the manufacturer to completely inactivate the germs (virus, bacteria etc.)	<i>Transmission of infection by contaminated multidose vial</i>	<i>Vasovagal syncope in an adolescent following vaccination</i>	<i>A fever after vaccination (temporal association) caused by a respiratory tract infection</i>



# Management of AEFI

# Management of non serious AEFI

Therapeutic remedies against fever and pain

- Paracetamol
- 15mg/kg every 6-8 h
- Maximum 4 doses / 24h

Non therapeutic remedies against fever

- Tepid sponging or warm bath
- Light cool clothing
- Oral rehydration

Non therapeutic remedies against local reactions

- Cold bandage applied to the injection site

 *Traditional medicines are to be avoided*

**In case of worsening, take the patient to the nearest health facility with the vaccination card**

# Management of serious cases in health Facilities



Thank  
you

