



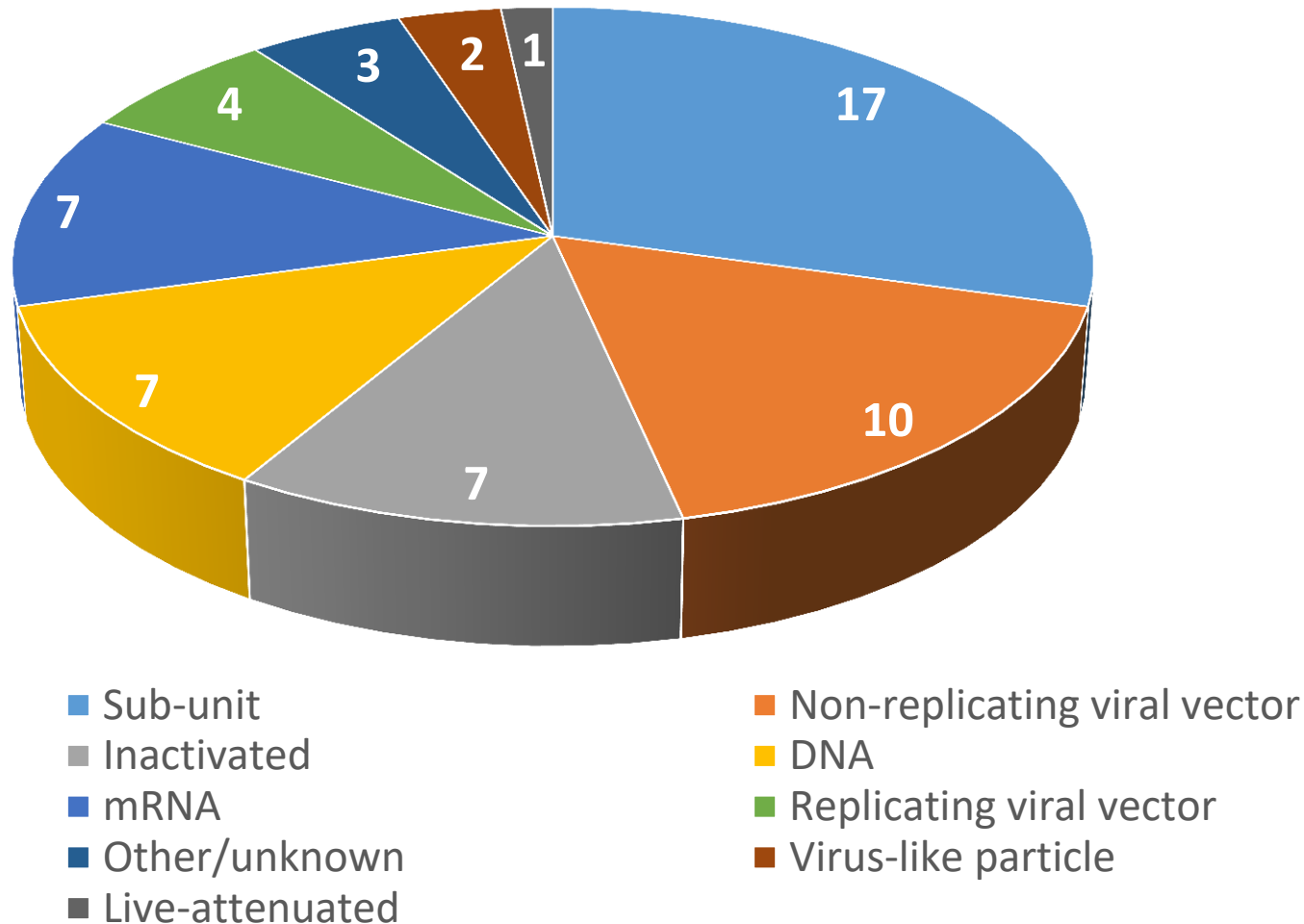
सत्यमेव जयते

# COVID-19 VACCINE ROLL OUT

**Ministry of Health & Family Welfare**

10<sup>th</sup> December 2020

# Global Landscape: COVID-19 Vaccine Candidates in Clinical Trials



203 candidates in pre-clinical stage

58 candidates in Clinical Trials

11: Phase 3  
01: Phase 2/3  
04: Phase 2  
17: Phase 1/2  
25: Phase 1

# Indian Landscape of COVID-19 Vaccines

S. No.	Product	Indian Manufacturer	Collaborator	Current stage
1	Covishield (Chimpanzee Adenovirus)	Serum Institute of India, Pune	Astra Zeneca	Phase II/III
2	Covaxin (Inactivated Virus)	Bharat Biotech International Ltd, Hyderabad	Indian Council of Medical Research, India	Phase III
3	ZyCoV-D (DNA vaccine)	Cadila Healthcare Ltd, Ahmedabad (Zydus Cadila)	Dept of Biotechnology, India	Phase II
4	Sputnik V (Human Adenovirus vaccine)	Dr. Reddy's lab., Hyderabad	Gamaleya National Center, Russia	Phase-II over, Phase-III to start next week.
5	NVX-CoV2373 (Protein Sub-unit)	Serum Institute of India, Pune	Novavax	Ph III under consideration in India
6	Recombinant Protein Antigen based vaccine	Biological E Ltd, Hyderabad	MIT, USA	Pre-clinical animal studies concluded. Phase I plus II human clinical trials started.
7	HGCO 19 (mRNA based vaccine)	Genova, Pune	HDT, USA	Pre clinical animal studies over. Clinical trials (Phase I and II) to start.
8	Inactivated rabies vector platform	Bharat Biotech International Ltd, Hyderabad	Thomas Jefferson University, USA	Pre-clinical (Advanced)

# NEGVAC (National Expert Group on Vaccine Administration for COVID-19)

- Constituted on 7<sup>th</sup> August 2020, **Member (Health) NITI Aayog** is chair and **Secretary, H&FW** is Co-chair
- Representation of:
  - **Relevant ministries** of Government of India
  - Five **State governments** viz. Assam, Madhya Pradesh, Maharashtra, Tamil Nadu and Uttar Pradesh
  - **Technical Experts**
- NEGVAC provides guidance on:
  - Prioritization of population groups
  - Procurement and Inventory management
  - Vaccine selection and
  - Vaccine delivery and tracking mechanism

# Key Considerations During COVID-19 Vaccination Planning

- The COVID-19 vaccination strategy has been formulated as per guidance of NEGVAC.
- Most candidate vaccines follow a 2-dose schedule.
  - One and three dose schedule for one candidate vaccine each.
- Vaccines are developed using multiple platforms, they are **not interchangeable**.
- **A beneficiary MUST complete vaccination schedule using same vaccine product.**
- Storage temperature for most candidate vaccines similar to other UIP vaccines (2<sup>o</sup> to 8<sup>o</sup> C)
- **Roll-out of vaccine should be done following the election model.**

# Phase-1 of COVID-19 Vaccine Introduction in Priority Group

## PHASE 1 – Approximately 30 Crore population

**Health Care  
Workers  
(Approx. 1 Cr)**

**Frontline Workers  
(Approx. 2 Cr)**

**Prioritized Age Group\***  
**( $\geq 50$  yrs. of age and  $< 50$  yrs with associated  
comorbid conditions) - approx. 26 Cr)**

\*Age considered as on 1 January 2021

- $\geq 50$  years group may be further sub-categorized into  $> 60$  years and between 50-60 years
- Modalities for data collection of  $< 50$  yrs with associated comorbid conditions being finalized

**Goal is to protect people, minimize societal and economic impact by reducing COVID-19 mortality**

# Prioritized Population Groups for COVID 19 Vaccination

NEGVAC has prioritized Health Care Workers, Frontline Workers and persons with different age-groups for COVID-19 vaccination. These are defined as –

## Healthcare Workers (HCWs)

Healthcare providers and workers in healthcare settings

## Frontline Workers (FLWs)

Personnel from State and Central Police department, Armed Forces, Home Guard and Civil Defense Organization including disaster management volunteers and Municipal Workers (excluding HCWs)

## Prioritized Age Group

Person above age of 50 years and persons <50 years with associated comorbidities

Process of collecting database of HCWs has already begun across states and central line ministries **(including Health facilities under Ministry of Home Affairs- MHA)**

Creation of Frontline Workers database process is to be initiated

MoHFW already has eVIN (Electronic Vaccine Intelligence Network) which provides real-time information of vaccine stocks & storage temperature till the last mile

Being expanded to include beneficiaries for COVID-19 Vaccine

# Frontline Worker Categories

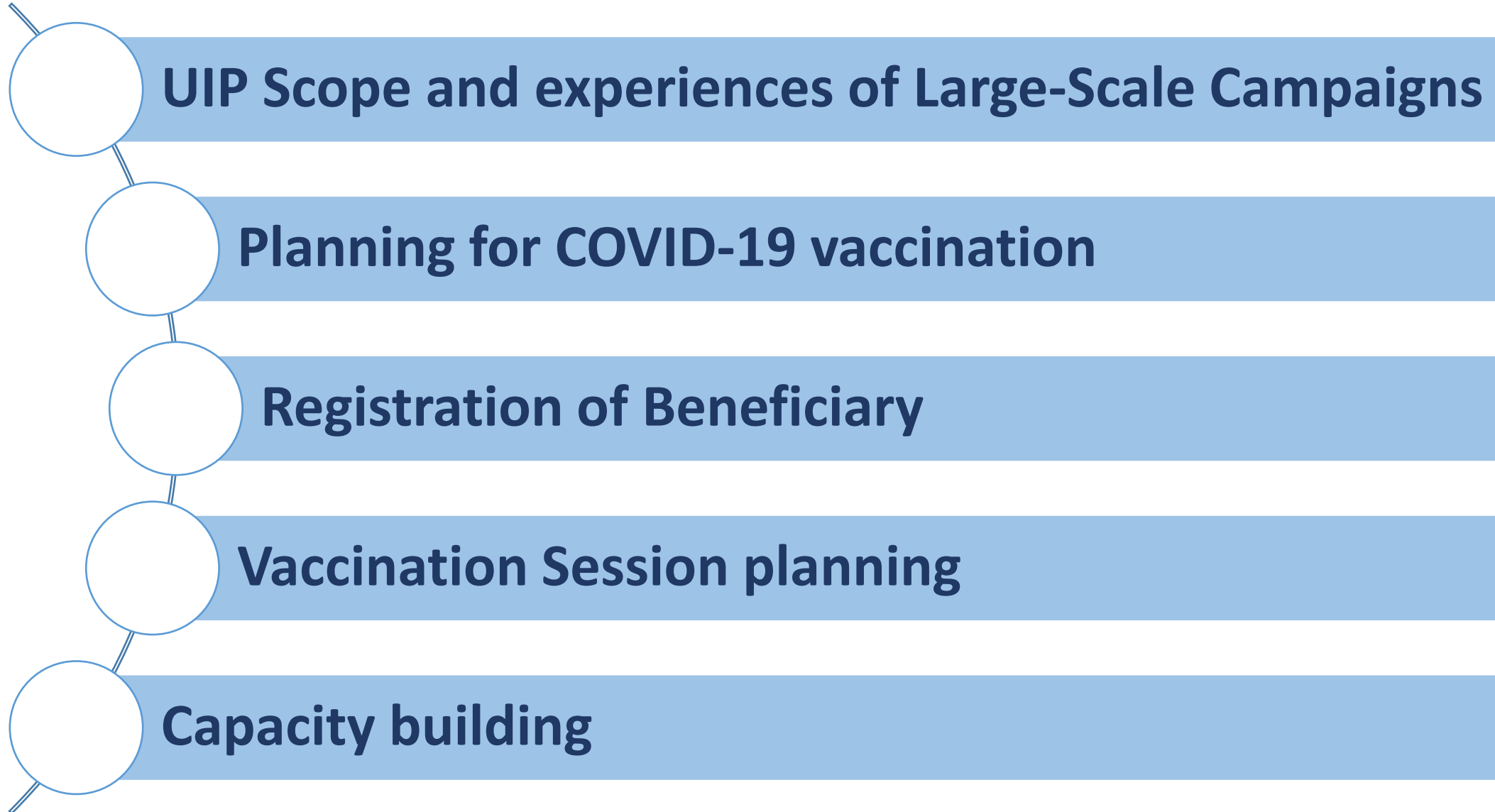
Frontline workers are personnel from the following departments:

Ministry of Defense	Ministry of Home Affairs	Ministry of Housing & Urban Affairs	State Govt.
Army	Assam Rifles (AR)	Municipal Workers	State Police Staff
Air Force	Border Security Force (BSF)		
Navy	Central Industrial Security Force (CISF)		
Coast Guards	Central Reserve Police Force (CRPF)		
	Indo Tibetan Border Police (ITBP)		
	National Security Guard (NSG)		
	Sashastra Seema Bal (SSB)		
	District Police Staff, Home Guard, Disaster Management Volunteers		



# Overview on Operational Planning

# Operational Planning



# Universal Immunization Programme (Scope & Scale)

## Annual Cohort

2.6 crore newborns;  
2.9 crore pregnant women

Vaccine against 12 Vaccine Preventable Diseases

10 nation wide; 2 sub-nationally  
[Pneumococcal Conjugate Vaccine (PCV):  
under expansion; JE: Endemic Districts]

**One of the largest Public Health Programmes**

Approx. 1.2 crore sessions planned per  
year

Total 28,947 cold chain points for storage and  
distribution of vaccines

# CoWIN

## Digital Platform for COVID-19 Vaccine Delivery

# Co-WIN: Digital Platform for COVID-19 Vaccine Delivery



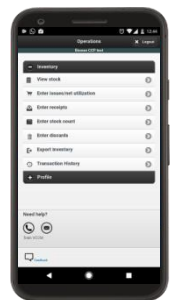
- ✓ COVID-19 Vaccine Distribution & Management System
- ✓ First end-to-end system across the world
- ✓ Electronic Beneficiary Registration
- ✓ Automated Beneficiary Session Allocation
- ✓ Integrated with Aadhaar/UHID (authentication), DigiLocker (document verification) & SafeVac (AEFI reporting)



- Integrated Vaccine Supply Chain Management System
- Implemented in over 34 States/UTs and 720+ Districts
- 28,500 Cold Chain Points
- 23,000 Temperature Loggers
- 28,000 eVIN Users

Registered URL – [www.cowin.gov.in](http://www.cowin.gov.in) and [www.app.cowin.gov.in](http://www.app.cowin.gov.in)

# Co-WIN: Digital Platform for COVID-19 Vaccine Delivery



## Co-WIN Mobile App

*Easy-to-use **mobile app** for recording vaccine data*



## Temperature Logger

*Temperature loggers for accurate remote temperature monitoring in real time*

## Co-WIN Beneficiary Management Platform



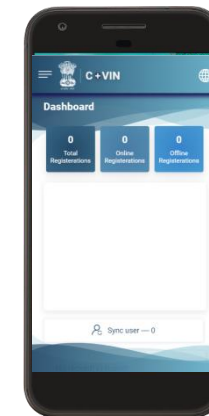
## Beneficiary

- *Beneficiaries tracking*
- *Vaccination Session Management*



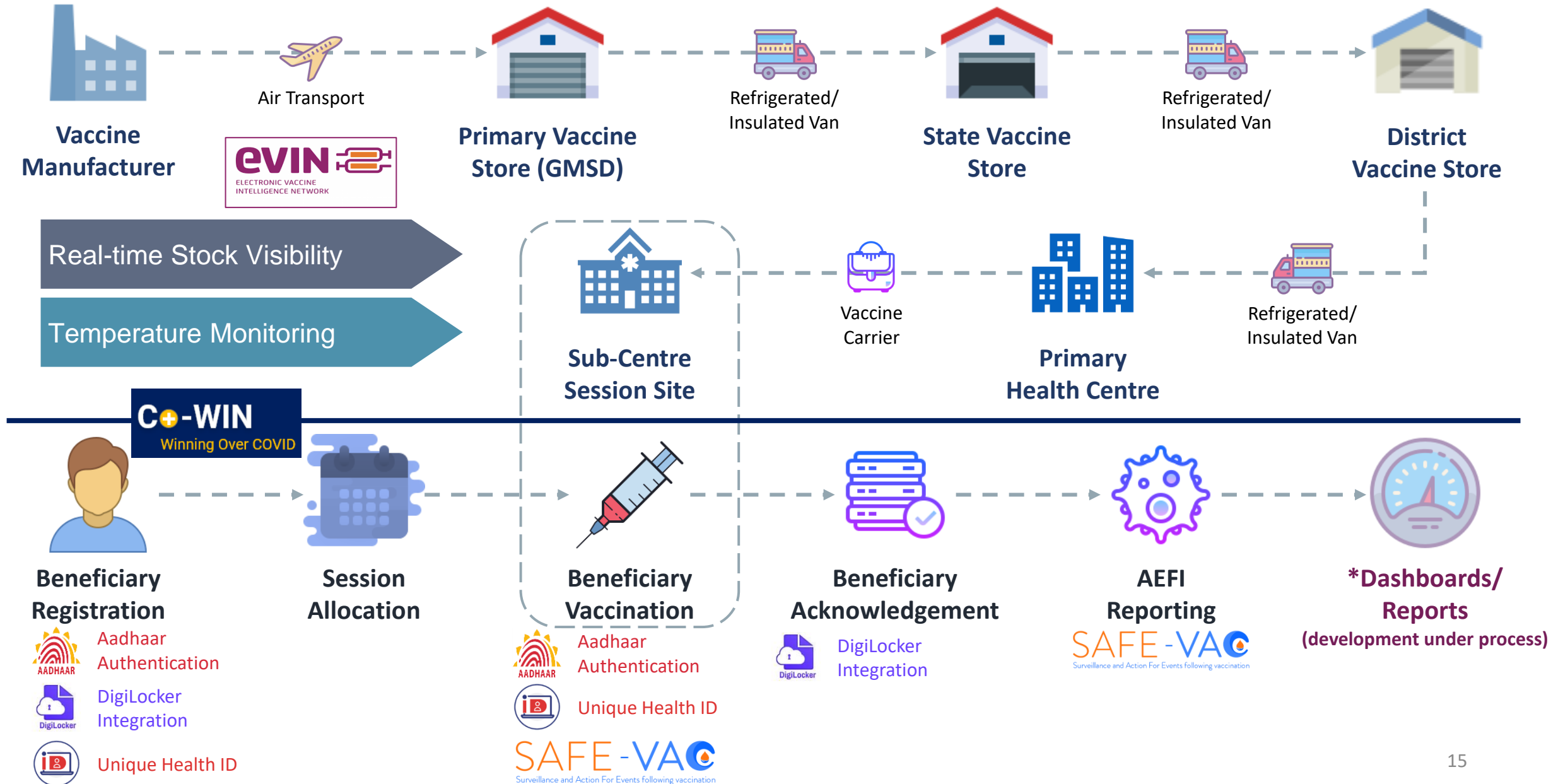
## Co-WIN Dashboard

*Web interface for real-time visibility*



## Co-WIN App

# Co-WIN Vaccine Delivery Management System



# Beneficiary Registration to Vaccination



- Beneficiary Registration



- Session Planning



- Session Site Allocation



- Beneficiary Listed for Session



- SMS to Beneficiary with vaccination date/time



- Vaccination done at Vaccination Site. SMS sent.



- Vaccination Certificate after completion of vaccination



# Guiding Principles of Vaccine Eligibility for Beneficiaries

## Registration of Beneficiaries



Beneficiaries for Vaccination



# Co-WIN Modules

## Administrators' Module

## Inventory Management

## Temperature Monitoring

## Beneficiary Registration

## Session Planning

## Vaccination

## Analytics/Dashboards

National Admin 

State Admin 

District Admin 

- Individual User Registration
- Role Mapping
- Bulk Upload User Registration

National Admin 

State Admin 

District Admin 

Cold Chain Handler 

- Inventory Receipt
- Material Allocation
- Inventory Management

Cold Chain Handler 

Program Manager   


- Temperature Monitoring
- Real Time Stock Visibility

National Admin 

State Admin 

District Admin 

Surveyor   


- Bulk Upload Beneficiary Registration

Beneficiary   


- Self Registration
- Status Track

District Admin 

- Session Creation
- Session Allocation

Vaccinator 

Supervisor 

- Beneficiary Verification
- Vaccination
- AEFI Reporting

Program Manager   


- Co-WIN Dashboards
- Users
- Beneficiary Coverage
- Beneficiary Dropout
- Sessions Planned v/s Sessions Held
- Vaccine Utilization

# Co-WIN Integration with Other Platforms



With NHA for **Aadhaar** authentication and creation of **Unique Health ID**



With **DigiLocker** for photo IDs and Digital vaccination certificate



Integrated with **SafeVac** for AEFI reporting at Vaccinator and DIO Level

# Five Member Team at Session Site

## **Vaccinator Officer: – Trained for injectables**

(Doctors (MBBS / BDS), Staff Nurse, Pharmacist, ANM, LHV)

If session load 100-200: Add one more vaccinator

## **Vaccination Officer-1: - checks registration status of beneficiary**

(Police, home guard, Civil defense, NCC, NSS, NYK)

## **Vaccination Officer-2: To authenticate / verify document**

Health / ICDS / other government department e.g. election model

## **Vaccination Officer-3 & 4: Support staff - Crowd management, Ensure 30-minute wait, IEC / communication**

ICDS / other government department e.g. election model

**If session load is beyond 200 - deploy additional team**

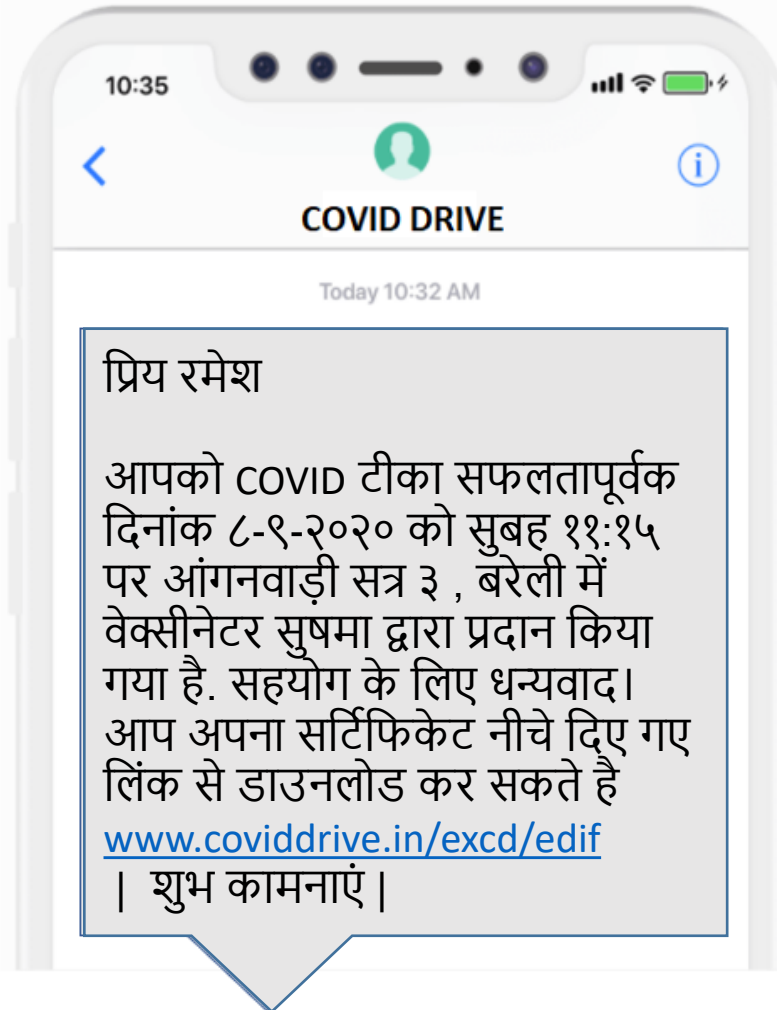
# Vaccination Completion

## SMS & Certificate template

Beneficiary vaccinated

SMS notification for particular dose with next date & time for subsequent dose

Digital certificate with QR Code



The certificate template features the Indian national emblem and the motto 'सत्यमेव जयते' (Satyameva Jayate) at the top. It includes a placeholder for the beneficiary's photo. The text certifies that Mrs. Sangeeta, born on 11/4/1967 and residing at 8-101 Malviya Nagar, Jaipur, Rajasthan, 302017, has been successfully vaccinated for Corona Virus. A table below lists the vaccination schedule:

Dose	Date	Place	Vaccinator	Vaccine Batch #
1 <sup>st</sup>	4/4/2021	AWC1, Jaipur	Santosh	1120BCCL-SII
2 <sup>nd</sup>	5/7/2021	AWC1, Jaipur	Santosh	234ME22-SII
3 <sup>rd</sup>	7/10/2021	AWC1, Jaipur	Santosh	3NJC2222-SII

At the bottom, there is a QR code and a line for the 'Authorized Signatory'.

# Level of Operations (To be defined by MHA)

## (Level-1 MHA Nodal Officer)

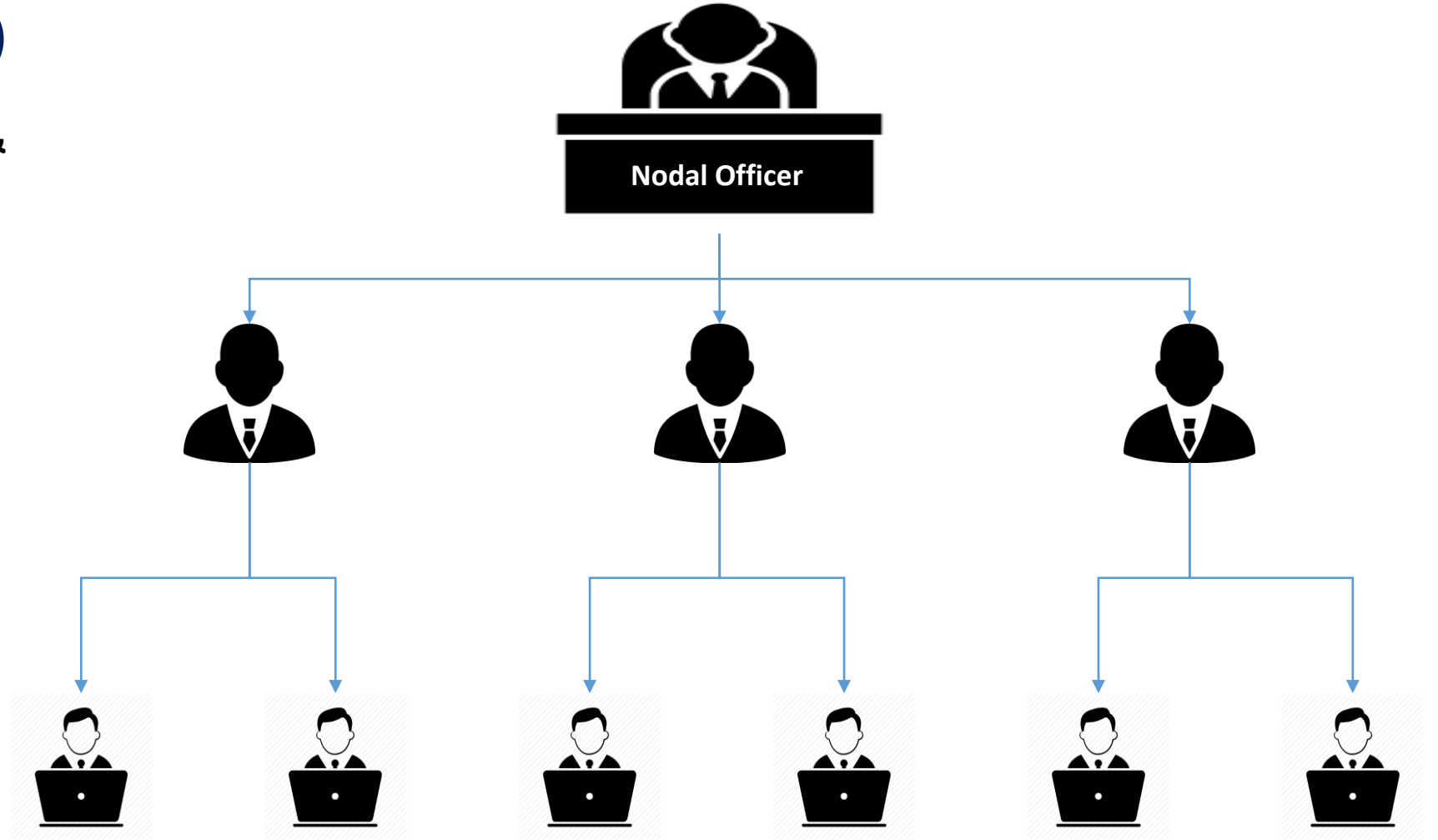
Will receive username & password from MoHFW and create username & password for Level 2/ Department

## (Level-2 Organization HQ like CISF, BSF, CRPF etc.)

Create username & password for level 3 and share the renamed template with level 3. Rights to edit data uploaded by level 3

## (Level-3 Field Unit like DIG, SSP etc.)

Will ensure data collection, collation, verification and upload of data



# Frontline Workers

## Frontline Workers under Ministry of Home Affairs

Central Police  
Forces

State Police  
Forces

Home Guards,  
Civil Defense  
Volunteers,  
Disaster  
Management  
Volunteers

Municipal  
Workers of  
Urban Local  
Bodies  
in UTs

## Frontline Workers Data Collection Process

[Appointment of Nodal Officers at each Level](#)

[Define Template \(drop down list\) for FLWs for database updation](#)

Compile data of FLWs as per the Template

The data entry of the FLWs will be done in two ways

[Bulk Upload using www.co-vin.in](http://www.co-vin.in)  
[without Aadhaar](#)

[Beneficiary data entry in application with/without Aadhaar](#)

# Bulk Uploading Templates on [www.covin.gov.in](http://www.covin.gov.in)

The screenshot shows the 'Manage Users' page with an 'Import Users' modal dialog open. The dialog contains a 'Drag & Drop files here' area, an 'Or' separator, and a 'Browse files' button. Below the dialog, there are 'Upload' and 'Cancel' buttons. The background interface shows a table of users with columns for Name, Mobile, and Actions.

Name	Mobile	Block	Actions
Test Vaccinator	555111	Ambegaon	...
Ra	444111	Ambegaon	...
Sudhir DA	816957	Ambegaon	...
ketan	988932	Ambegaon	...
ketan	998932	Ambegaon	...
Ramesh Kumar	4441112223	Ambegaon	...
Sangeetha	9876545678	Ambegaon	...

- Click on browse files and select the excel sheet of the Field Unit (Level 3) you want to upload from your computer and then click on upload

The screenshot shows the 'Manage Beneficiaries' page with an 'Import Beneficiary' modal dialog open. The dialog displays the results of an import: '0 Successfully Imported Records' and '85 Failed Records (Download List)'. The 'Download List' text is highlighted with a black box. There is a 'Close' button at the bottom right of the dialog. The background interface shows a table of beneficiaries with columns for Beneficiaries Name and Document No.

Beneficiaries Name	Document No
No records to display	

- Download the list of failed records, get it corrected and re-upload

Demo available at <https://uat.co-vin.in/login>



# Status Update

- On 4<sup>th</sup> Nov and 9<sup>th</sup> Nov, meeting was conducted by Secretary (Home Affairs) on the issue of collection of data for Healthcare Workers and Frontline Workers.
- A detailed demonstration of database uploading was also given to all concerned.
- The same has not been compiled and submitted so far.
- On 8<sup>th</sup> December, another orientation on CoWIN Module was done along with CRPF, CAPF, Assam Rifles, SSB, CISF and BSF for FLWs data collection through Video Conferencing.
- Only level 1 created - Sh. S.K. Sahi & level 2 Created for 8 Units, CRPF, BSF, Assam Rifles, CISF, ITBP, SSB, NSG and NDRF

S No	Name	Mobile No	Access Level
1	Sh M S Bhatia IG, CRPF	9431138605	Level 2 FLW CRPF
2	Sh R S Rathore IG, BSF	9408764945	Level 2 FLW BSF
3	Brig Surendra Singh, ARs	9774470450	Level 2 FLW ARs
4	Sh Devdatta Singh IG, CISF	9899721689	Level 2 FLW CISF
5	Sh DS Chaudhary ADG, ITBP	9971555400	Level 2 FLW ITBP
6	Sh P Stobdan IG, SSB	8800940101	Level 2 FLW SSB
7	Sh Abhishek Trivedi IG, NSG	9447322108	Level 2 FLW NSG
8	Sh. A K Sengar IG, NDRF	8004042000	Level 2 FLW NDRF

# Tasks Ahead

Creation of L3 users

Categories of Field units

Categories of Frontline workers in each units

Bulk Upload/ Entry in Portal

Finalize Timelines to complete the database

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# Thank You