

COVID-19 Exercise Programme

Drills for Vaccine Deployment



How to use this guide

This guide sets out four common exercises can be used in conjunction with your country vaccination programme. It consists of four elements or 'Injects' which are placed sequentially and can be used either as stand alone drills or as part of a system of testing the entire setup procedure. The Drills programme consists of the following:

1. Select a site for the vaccination point or clinic
2. Setup the vaccination clinic
3. Operate the clinic and manage patients
4. Close the clinic for the day and manage expectations

Each section has the following:

Demonstrated Goals

These are the minimum requirements to successfully complete the exercise. These are flexible and can be edited to suit the needs of your programme

Requirements for the exercise

These are the minimum requirements that need to be fulfilled before the exercise can take place. These vary between each of the injects and should be prepared in advance. They range from simple requirements such as finding a suitable space, through to complex preparation, such as preparing all of the equipment required to run a vaccine centre. Ensure that as much preparation is carried out before the exercise as this will save time

Tip: Preparing equipment before the exercise and ensuring that it is correctly labelled will save you time in both the setup and the conclusion of the exercise.

Instructions to participants by facilitators

These are the instructions that you as the facilitator will give to the participants. Do not feel constrained by this as explaining what you want clearly and concisely will enable the participants to understand what is expected of them.

Always ensure that participants have been issued with a stop command so that the exercise can be suspended in case of a real incident or an accident on site. Often this is just the words

STOP STOP STOP

Facilitators Instructions:

Facilitators instructions are things to consider while you run your exercise

Evaluators Criteria:

These are the criteria which measures the success of the participants. This criteria should be linked to the Demonstrated Goals. By having a list pre-prepared, the facilitator and the Evaluator can ensure that all tasks have been completed and can form as a basis for the debriefing after the exercise

Actors Notes

Some parts of the exercise will involve the use of Actors. These actors must be briefed before the exercise and their role is to be carefully explained to them. At no time should an actor deviate excessively from the script (although a little role play can add interest and fun). The actors notes allow them to understand their role and what is expected of them

Drills for Vaccine Deployment - Overview

About this programme	This programme has been developed as a set of four drills that can be undertaken to test and practice key elements of your vaccine deployment programme. These activities are centred on your local health care centre or hospital and are designed to help you familiarise yourself with some of the basic elements you will need to have in place before an effective vaccine programme can commence.
What is a drill?	A drill is a coordinated, supervised exercise activity, normally used to test a single specific operation or function in a repeated fashion (WHO, 2009).
Why is it necessary to do a drill?	<ol style="list-style-type: none"> 1. To test your plan because you are ready to see if your plan or a part of your preparedness plan is complete 2. To build the relationships you will use during a real event 3. Each drill you do will help you practice the actions you will take during the real event 4. To give confidence in your plans and procedures

Purpose, Scope and Objectives. Why are we doing these drills?	
Purpose:	To test the set up and management of a vaccine facility with a minimum of four vaccination stations
Scope:	Testing clinic procedures and patient management
Objective:	To test patient management, equitable setup, control and systems management
Concluding the Drills	Always ensure that a HotWash debriefing session is conducted after each part of the drill programme (after each 'Inject') and that a full debrief is conducted at the end of the drill programme

Drill One: Demonstrating setup

The following drill is to test setup requirements for a vaccination point at a primary health care centre.

Demonstrated Goals:

1. Demonstrate the identification of a vaccination point that is suitable for up to 50 patients per hour
2. Demonstrate hygiene control including COVID-19 measures (such as entry and exit) is undertaken
3. Equitable vaccine access at the site will be demonstrated including gender awareness and factoring of vulnerable groups needs like the elderly

Requirements for the exercise

The facilitator can advise the participants to assemble equipment beforehand

1. Room or space suitable for at least 10-30 people to move easily. This may include an outside or semi-covered outdoor space
2. Equipment available that would be utilised in a real vaccination centre. It is expected that the participants will bring the required equipment that is available, on hand so that gaps in equipment availability will be identified. Having a third party provide equipment brings in an artificiality that could mean that equipment deficits are overlooked
3. 1 facilitator, 1 immunization evaluator/expert

Instructions to participants by facilitators:

1. Take the participants to a clinic/sites where the simulation exercise will take place
2. Participants are asked by facilitator to select a room in the clinic that will be suitable for your vaccination campaign.
3. Verbally describe to the evaluator why you have selected this place
4. Follow this with a Q&A Session

Facilitators Instructions:

1. The participants are free to select any room or place in the clinic that they feel will be useful for a vaccination campaign.
2. Ensure that normal operations of the clinic are not overly disrupted
3. When they have settled on a space they feel comfortable with, engage them in a discussion about why this is suitable

Evaluators Criteria:

1. Space suitable for at least 10-30 people
2. Participants accurately describe access control measures and hygiene and COVID-19 precautions
3. Participants provide solid reasoning for the location
4. Participants include an awareness of gender and vulnerable issues in the site selection
5. If the space is outside, how will they manage weather conditions, crowd control and hygiene challenges?

Drill Two: Vaccination Centre Setup

Demonstrated Goals:

1. The participants will setup the vaccination centre with all of the equipment required to successfully operate the centre. At the end of the drill the centre will be fully operational.
2. Equitable vaccine access will be demonstrated including gender awareness and factoring of vulnerable groups needs like the elderly
3. The participants should be able to undertake simple vaccine calculations based on the number of vials of vaccine available.

Requirements for the exercise

The facilitator can advise the participants to assemble equipment beforehand

1. All equipment required to operate the vaccination centre
2. Include where vaccines will be stored and how they will be managed within the site. Include sharps disposal. This can be simulated through the use of props (for instance empty boxes)
3. Include screens and other privacy measures
4. DO NOT compromise sterile components at this stage (don't open sterile packaging but place sealed objects where they would be used)
5. Include staff PPE
6. Minimum requirement of one facilitator and one immunization evaluator/expert

Instructions to participants from facilitators:

1. Using the equipment on hand, setup the vaccination centre as you would for a mass vaccination campaign
2. Place equipment as you would need it
3. DO NOT open any sterile packaging at this time
4. Don appropriate PPE
5. Be prepared to explain to the facilitation team how the system works

Facilitators Instructions:

1. Guide them to use the equipment on hand but reinforce that there is no need to open sterile equipment at this time
2. Encourage them to put things in place. At the end of this drill they should be in a position to vaccinate people. Use real equipment wherever possible.
3. When they are ready, have the participants talk you through their setup

Calculations should be used by the participants. Below is an example of a commonly used calculation methodology

CALCULATIONS

	TOTAL
Calculate required vaccine doses = Target number x adequate wastage factor (WF)	
Calculate required number of vaccine vials = Vaccine doses ÷ number of doses per vial	
Ensure enough auto disable (AD) syringes = 1 per vaccine dose	
Ensure enough diluent vials (if applicable) = 1 per vaccine vial	
Ensure enough reconstitution syringes (if applicable) = 1 per vaccine vial	
Ensure enough safety boxes = Total number of AD and reconstitution syringes ÷ 100	

Drill Two: Evaluators Criteria:

1. At least one vaccination point is correctly setup
2. The setup includes all relevant equipment according to their checklist. If they do not have a checklist, ensure that this is recorded
3. The participants should be able to detail the following:
 - a. How people enter and leave the site
 - b. How patients are briefed about the procedure when they enter
 - c. How they are registered and managed while on site
 - d. What public health precautions are undertaken, including what PPE is worn by both staff and patients and any hand washing stations, disinfectant, etc
 - e. Where patients sit and how the system differentiates between genders (privacy concerns, questions asked, making people feel comfortable and in control)
 - f. How the vaccine is administered, and the sharps disposed of
 - g. How the patient is discharged
 - h. Presence of signs for directions and other IEC materials on vaccination process
 - i. What other activities will be undertaken
4. Is waste effectively managed?
5. Demonstrate how vaccine calculations are made
6. At the end of this part of the exercise, ask the participants to lead you through the setup as though you were a prospective patient

Drill Three A – Operations.

To be run in conjunction with Part B

Demonstrated Goals:

1. Minimum of 10-30 people will arrive for vaccination. These must be managed, paperwork correctly completed, provided with a vaccine and managed to departure. Vaccines must be correctly managed
2. OPTIONAL. Some participants have asked if the COVID vaccine can be administered to volunteers at this point. This should be left to the discretion of medical services, however as this involves the use of sharps in a training environment, extra care should be taken and vaccine delivery must be supervised at all times regardless of the skill and qualifications of the administering clinician.

Requirements for the exercise

The facilitator can advise the participants to assemble equipment beforehand

1. Previously setup drill clinic
2. 10-30 volunteers to act as patients. If using real vaccine, sufficient stocks of vaccine and associated equipment
3. Required paperwork, including forms, tally sheets (or other reporting forms, depending on recommendation, including tracking for 2 doses). For outreach sessions, prepare an up-to date microplan.
4. Develop list with contact phone numbers (e.g. supervisor, focal person for adverse events following immunization (AEFI), ambulance driver).
5. List of beneficiaries for the day
6. Immunization evaluators/experts, observing the vaccination sites especially if there are many rooms; this will help to evaluate the different stages/activities from entry to exit of client
7. Three primary scripted actors. The rest of the patients just play themselves as patients. The rest are welcome to ask questions of the vaccinators and engage in conversation.

Instructions to participants from facilitators:

1. Manage patient entry
2. Complete paperwork to a required standard
3. Invite the patient for vaccination and explain to the patient what will happen
4. Give the vaccine and demonstrate proper hygiene and sharps disposal
5. Explain to the patient what comes next
6. Release the patient and manage the workspace in preparation for the next patient

Facilitators Instructions:

1. If using real COVID-19 vaccine as part of a dry run process, ensure that suitably qualified experts are supervising the process
2. If no vaccine is being used DO NOT use any sharps and simply have the participants explain the process for each patient
3. Keep in mind health and safety at all times
4. Each participant should have at least two patients. Once all the actors have been through the process once call and END to the drill.
5. Remember, this part of the exercise will be using actors. These actors for this part will be the playing the role of the general public. They should be encouraged to act excited, curious and maybe nervous (no-one really loves getting a vaccine). Encourage the actors to talk to the participants and ask the sort of questions patients ask of medical staff. All of your actors will be compliant, friendly and helpful
6. Aim for a minimum of 10 actors. Try not to use more than you can manage easily. You can always recycle the actors

Evaluators Criteria:

1. How do they receive patients?
2. Are the patients properly briefed on the process?
3. Is the paperwork completed to a high standard?
4. Is contact tracing information properly recorded? Is this the case for people with incomplete or unusual addresses, we want to check if information provided can assist in tracing the clients?
5. How are people brought to the workstation? Are they properly reassured?
6. How is the vaccination undertaken?
 - a. Is the dose properly drawn up using the correct equipment?
 - b. It is administered using the correct equipment
 - c. Is it administered correctly (or described correctly)?
 - d. Are the sharps correctly disposed of and is the after-patient care sufficient?
 - e. Is the patient monitored for a few minutes before discharged to ensure no adverse reactions?
7. How is the patient directed out of the clinic?
8. What information are they given before leaving and is this sufficient?
9. Are they given advice on the delay in seroconversion and advice as to when to get their booster injection?
10. Is waste effectively managed? Ask participants about when they would dispose of sharps containers and how. Ask how they will manage vaccines not used that day.
11. Immunization evaluators/experts, observing the vaccination sites especially if there are many rooms; this will help to evaluate the different stages/activities from entry to exit of client

Instructions to Actors

Who are you?

You are a member of the public who has come to get their COVID-19 vaccination. This is a great day and you should feel excited. Get into your role by thinking about going to get your real vaccination. Ask yourself how you felt and act accordingly.

What do you want?

My vaccine. I'm not in a great hurry and I will happily fill out all the paperwork needed and I will follow all instructions (regardless of how silly they may seem). I will take instructions literally - if someone asks me to wait on a chair, I will stay there until someone tells me otherwise. If I wait too long I will ask people for help. If instructions appear to be unusual I will ask for clarification

Important - I will never put myself in danger and I will always alert others to danger

What will you do?

I will ask questions about the vaccination programme. You are welcome to ask any question you like but as a guide here are some common ones:

1. Will it hurt?
2. Do I need to get another vaccine and how long will I need to wait?
3. How long until the vaccine gives me some protection?
4. Can my children come and be vaccinated?
5. Can I take home my syringe as a souvenir?
6. Can you sign a piece of paper to let my employer know that I have had the vaccine?
7. Can I have the rest of my family come to get the vaccine?

Drill Three Part B – Managing Adverse Effects and unusual events

Demonstrated Goals:

1. One patient who will suffer adverse effects
2. One pregnant patient
3. Once patient on medication for severe asthma

Requirements for the exercise

The facilitator can advise the participants to assemble equipment beforehand

1. During part three of the drill three of the actors will present adverse effects or have conditions that could compromise their safety
2. 1 facilitator and 1 immunization evaluator/expert
3. 3 actors

Instructions to participants from facilitators:

1. A key task at any vaccination centre is patient screening. Ensuring that anyone with pre-existing conditions or are in at-risk groups are identified and managed. Some may need to be excluded from vaccination at this time and it is important that the patient understands why and what to do. As vaccinators you will be presented with people who may not be suitable, and you will need to discuss this.
2. In very rare cases, some people have reactions to vaccines. Most reactions are mild and resolve themselves after a short period of time. However, it is important to manage and document any reactions that appear to be more severe.

Facilitators Instructions:

1. You need to have trained the actors using the scripts above on their roles/how to role play. These actors need to be properly briefed and scripted. Ensure that a facilitator is always nearby to ensure that people don't run off script too far.
2. There are three identified people here who will have conditions or who will exhibit adverse reactions to vaccination. You can add more as required, however, ensure that you consult the relevant documentation on the vaccines in order to keep symptoms consistent
3. Do not overblow symptoms. Most are very mild. Severe symptoms are very rare and usually implicated in pre-existing health conditions and this will be too complex for this drill.

Evaluators Criteria:

1. How do they manage patient information?
2. Do they correctly identify people with pre-existing conditions and provide correct advice?
3. How do they manage patients with side effects?
4. Are they diligent and attentive to patient needs?
5. Do they reassure other people in the clinic?
6. Where do they put the patients with adverse effects?

Instructions to Actors

Four actors will act as people with either;

1. a complication from the vaccine (adverse effect),
2. an underlying health condition that will need to be assessed
3. be unsuitable for the vaccine under its current licence
4. want special provisions in order to have the vaccine

The facilitator will select four individuals - Two Male and Two Female and they will be handed these cards:

Actor One – Male

Who are you?

You have come for your COVID-19 vaccine. You are in apparently good health and are looking forward to the vaccination. You are cooperative with staff and will fill out all of the paperwork provided.

What happens?

When your vaccination is complete you will wait about 5 minutes before approaching one of the staff (participants) and telling them that you don't feel very well. Tell them that you have had your vaccine about 5 minutes ago and that you feel weak and cold. You are feeling dizzy and feel like you will fall over.

Immediately find somewhere to sit and act like you are very ill. If there is somewhere to lie down, even better. If you are not being taken seriously start to groan, make a noise and lie in the middle of the floor, across chairs or anywhere where you will be in the way

Tell the participants that you are feeling weak and feel like you will vomit. Complain of pain around the injection site.

You will not lose consciousness and your symptoms will not get worse.

You will exhibit all the classic symptoms of shock and the symptoms will pass in about 20 minutes.

You will cooperate with staff but **DO NOT ALLOW THEM TO INJECT YOU OR INSERT A LINE** (remind them this is an exercise). O2 support is fine. You will feel much better after O2

When you feel better ask to leave and fill out any paperwork they require

Actor Two - Female

Who are you?

You have come to get your COVID-19 vaccination. However, you are early into your second trimester of pregnancy. You are not outwardly showing at the moment and it is not obvious that you are pregnant.

What happens?

You want to get the vaccine and you will fill out the required paperwork. If there is a section that asks if you are pregnant answer that this is the case. Hand over any paperwork but do not mention at this time that you

are pregnant. If anyone asks if you are pregnant or questions your paperwork tell them that you are pregnant.

If you make it all the way to a vaccination, tell the vaccinator before being given the vaccine. If you make it this far, also alert the exercise evaluator and the facilitator

NOTE: None of the current vaccines are licensed for vaccinating pregnant or lactating women

Actor Three – Male

Who are you?

You have come for your COVID-19 vaccine. You are in poor health with several underlying conditions. You have the following:

1. Type two diabetes
2. High blood pressure which is being treated with an ACE inhibitor
3. Has a history of severe allergic reactions, particularly to egg based vaccines

What happens?

You will fill in the required paperwork and ensure that you note the underlying health conditions. If this is not picked up by the participants, mention this to any participant or to the vaccinator

If they offer you the vaccine, alert an evaluator and a facilitator in order to have a discussion about whether the person with underlying health conditions is suitable for the vaccine so that the participants can evaluate risk

Actor Four – Female

Who are you?

You have come for your COVID-19 vaccine. You are from a conservative religious community and find it difficult to interact with members of the opposite sex or to be placed in a position where people may observe you in different states of undress.

At no time are you to be alone with a male person who is not your relative.

What happens?

The patient will be cooperative and will fill in all of the required forms

If the patient is directed towards a male vaccinator she will quietly inform a female participant that she will only accept the vaccine from a female member of staff

When she is taken for vaccine, she will only remove clothes or expose her shoulders if she is completely hidden from other people and will strongly demand a closed, private cubicle.

If this is not provided she will leave without the vaccine

NOTES: Try to ensure that everyone who is eligible can have the vaccine

Drill Four – Closure and Managing Expectations

Demonstrated Goals:

1. Managing safety and Security at the clinic
2. Managing expectations of the public

Requirements

1. At the conclusion of the drill, this is a final part
2. Participants will pack up the vaccine centre or place into hibernation at the end of the day (depending on usage requirements)
3. Security will be managed at this point
4. Small crowd of people

Instructions to participants from facilitators:

1. Vaccination exercise has concluded for the day. Pack up the vaccine centre as you would normally at the end of the day. Return equipment as required and dispose of all consumables including PPE
2. There are no more doses of vaccine available, but there are still people waiting to be vaccinated

Facilitators Instructions:

1. Allow the participants to pack up the clinic at the end of the vaccination day
2. Explain to them that there are still people waiting and that they will need to address them and explain the situation – there are no further vaccines today, but more are being delivered tomorrow and over the next few weeks
3. Do not encourage them to meet with the extra people/try to make sure that they do not go to meet the extra people. If they fail to meet with them and explain the situation, encourage the crowd to start making a noise and try to get into the clinic
4. Ensure that the crowd does not become aggressive or overplay the part
5. If the crowd is successfully managed by the participants, they will depart satisfied.

Evaluators Criteria:

1. Participants should either remove the clinic or otherwise pack up the equipment, disposing of sharps and consumables (including PPE)
2. The participants should communicate with the crowd and manage the situation
3. Participants should be open and honest with the crowd and explain the situation. They may even consider taking names and setting up a system for the next day's activities
4. Success is judged by how well the situation is diffused.

Actors/role players notes - Print this card and give this to the actors for Drill Four

Instructions to Actors

The Crowd:

Who are you?

You have come for your COVID-19 vaccine. You have come late and the centre is closing. You have been told there will be no further vaccination today and you will need to come back tomorrow. You are disappointed and insist that there is still time. You will make a noise and try to get into the centre.

If you are politely spoken with and if the situation is explained well, you will leave, happy to come back tomorrow.

If you are just told to go away, you will make a lot of noise

DO NOT USE FORCE AT ANY TIME. DO NOT BREAK THINGS OR PHYSICALLY PUSH ANY PERSON. LIMIT YOUR INTERACTION TO MAKING NOISE AND CREATING A DISTURBANCE.

What happens?

You want the COVID-19 vaccine and are worried that they will miss out. They want the clinic staff to take action to either give them a vaccine now or to have a system to ensure they get the vaccine as soon as possible. You have travelled a long way and don't want to wait.

If your demands are listened to you will remain cooperative and respectful. You will fill out paperwork given to you and you will slowly leave without causing problems. You might grumble and shout but will be largely satisfied.