MINISTRY OF HEALTH-ETHIOPIA

Federal Democratic Republic of Ethiopia

Ministry of Health

Covid-19 Vaccination Training

Facilitator Manual

October, 2022
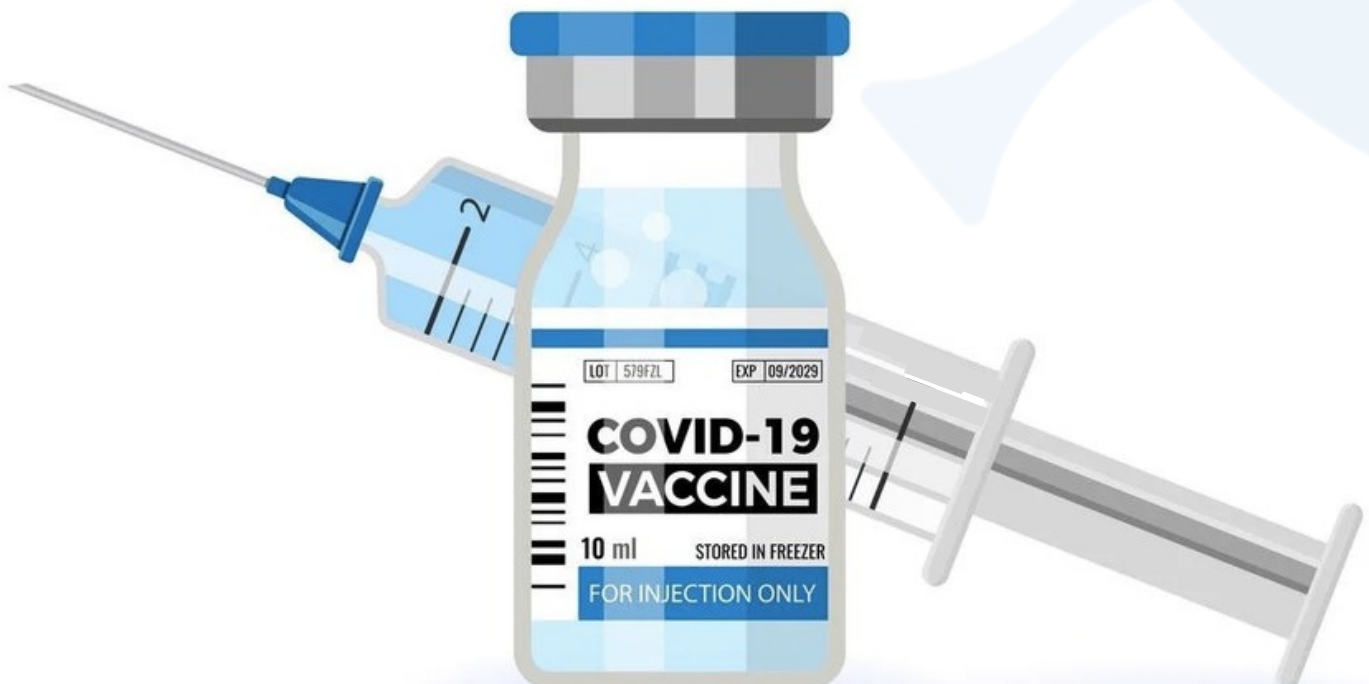
Table of Contents

Acknowledgement

The Federal Ministry of Health would like to sincerely thank all individuals and organizations who have contributed to the revision of the COVID-19 vaccine training participant manual and facilitator guide. This is the result of teamwork between FMOH, EPHI, EFDA, EPSS, WHO, UNICEF, USAID, CHAI, JSI-UI-FHS, GHSC-PSM, BMGF, TBI, PATH, CDC and AMREF who are committed to improving immunization services in Ethiopia.

Facilitator Guide Development Team Members

Name	Org	Name	Org
Dr.Meseret Zelalem	MOH	Mr. Belete Alebachew	MOH
Mr.Yohannes Lakew	MOH	Mr. Kibrom Abraham	MOH
Mr.Temesgen Lemma	MOH	Dr. Meheret Elias	MOH
Mr.Melkamu Ayalew	MOH	Mr. Mulat Nigus	MOH
Mrs.Tewabech Alemu	MOH	Mr. Yosef Tariku	MOH
Mr.Habtamu Alemay	MOH	Mr. Mengistu Bogale	MOH
Mr.Sileshi Solomon	MOH	Mr.Meseret Adugna	MOH
Mr.Michael Sileshi	MOH	Mr. Agumas Kindu	EPSS
Mrs.Mastewal Kerebih	MOH	Dr.Abayneh Girma	WHO
Dr.Alemayehu Ayele	MOH	Mrs.Alemtsehay Berhanu	GHSC_PSM
Mrs.Nafkot Abadura	MOH	Dr.Tedi Tilahun	WHO/EFDA
Mrs.Tseganesh Gedlu	MOH	Dr.Adamu Gelaw	WHO/EPHI
Mr.Girma Hailemariam	MOH	Mr.Haimanot Fisseha	UNICEF
Mr.Tesfaye Bikes	MOH	Mrs.Selamawit Yilma	WHO
Dr.Zufan Abera	MOH	Mr.Wondimu Ayana	WHO
Mr.Tekalign Admasu	MOH	Mrs.Tadelech Sinamo	JSI Immunization
Mr.Mengesha Belay	MOH	Mr.Haile Kasahun	AACAHB/CHAI
Mr.Jiregna Wirtu	MOH	Dr.Kume Alene	CDC
Mr.Biruh Tesfaye	MOH	Dr.Amare Bayeh	PATH
Mrs.Bezawit Getachew	MOH	Mrs.Bethelhem Assefa	MOH
		Mrs.Mekdim Hailu	MOH

LIST OF ABBREVIATIONS

AEFI	Adverse events following immunization
COVID-19	Coronavirus disease 2019
CSO	Civic service Organization
DHIS2	District Health Information System
EUL	Emergency Use Listing
FMOH	Federal Ministry of Health
FBO	Faith-Based organization
SAGE	Strategic Advisory Group of Experts
SARS-COV-2	Severe Acute Respiratory Syndrome Coronavirus 2
WHO	World Health Organization

FOREWARD

The most recently discovered coronavirus, severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), causes coronavirus disease 2019 (COVID-19). COVID-19 was unknown prior to the outbreak in Wuhan, China, in December 2019, but is now a pandemic affecting most countries globally.

The Government, in collaboration with partners, has maximized its efforts in response to the COVID-19 pandemic: including intensified case search; investigation and lab testing; establishing quarantine centers; establishing and expansion of COVID-19 treatment centers and diagnostic facilities; enforcement of COVID-19 prevention, and infection prevention and control (IPC) measures.

As a continued effort, the Ministry of Health has planned to introduce COVID-19 vaccine with the objective to reduce morbidity and mortality from the COVID-19 disease and minimize the overall negative impacts of the pandemic on health, social and economic wellbeing of the people of Ethiopia. Synchronized COVID-19 vaccination was launched on 13th of March 2021 nationwide in the presence of national and sub-national political leaders, religious leaders, other influential public figures and partner organization representatives.

Due to concern of limited supply of vaccine for the entire population, Ethiopia has followed SAGE's roadmap and country SARS CoV-2 epidemiology for prioritization of target populations to identify most at risk and prioritize them for the COVID-19 vaccination. As the vaccine supply increased significantly the need for target shifting was made and all people aged 12 years and above are the target populations for COVID-19 vaccination.

Therefore, the MOH, in collaboration with partners, has revised this training manual accommodating and including latest WHO emergency use list vaccines (EUL) and those which will be available in the global market that will be used as a guide to train and enable health professionals who will be involved during the COVID 19 vaccination to acquire and stay updated with the necessary knowledge, attitudes, and skills for the successful delivery of the COVID-19 vaccines.

Dr Meseret Zelalem Tadesse (MD, Pediatrician)

Director of the Maternal and Child Health Directorate at FMOH

About the manual

- This manual is intended to guide and update health professionals, EPI experts, and partners on each WHO-approved COVID-19 vaccine
- The manual is built upon existing documents and the core principles of the WHO Strategic Advisory Group of Experts (SAGE) values framework for the allocation and prioritization of COVID-19 vaccination, SAGE interim vaccine-specific recommendations, and COVID-19 vaccine explainer
- Due to the constantly changing environment for COVID-19 vaccine development, the guidance is based upon the best available and updated information at the time of publication. These assumptions will require updating over time due to the evolving situation
- This manual included all WHO Emergency Use listing vaccines, procured, and distributed through the COVAX facility and vaccines on bilateral donation
- In this manual, the upcoming lists of vaccines under review are highlighted

The manual consists of 8 sections covering key thematic areas and it can be updated whenever there is a new development.

Course Syllabus

Course Description	These 2 days of training are designed to equip trainees with appropriate knowledge, skill, and attitude to EPI managers and service-providing health workers regarding COVID-19 vaccines.
Course Goal	To transfer knowledge, skills and attitude to EPI managers and health workers on COVID-19 vaccines and enable them to provide better immunization services to the community.
Participants Learning Objective	After completing this course participants will be able to: ■ Describe the covid-19 mode of transmission, clinical features, epidemiological background, and prevention and control of the disease pandemic. ■ Describe facts on the rationale and objectives of the COVID-19 vaccine introduction in Ethiopia. ■ Describe the effective communication methods, demand promotion strategies and activities, and the communication process for successful COVID-19 vaccine introduction and implementation. ■ Explain basic concepts on targeting and prioritization of risk groups for COVID-19 vaccination and explain service delivery strategies as well as the organization of vaccination sessions. ■ Describes concepts on Adverse Events Following Immunization (AEFIs) monitoring to enable the participants to acquire the necessary knowledge and skills to monitor and manage AEFIs. ■ Describes the current global development on COVID-19 vaccines, WHO EUL vaccines, forecasting and procurement, vaccine storage, handling, cold chain management, and stock management. ■ Describes the necessary coordination mechanisms and planning process for COVID-19 vaccine introduction ■ Describes the importance of monitoring and evaluation during the COVID-19 vaccine introduction ■ Describes the roles and responsibilities of the major stakeholders involved during the COVID-19 vaccine at all levels.

	Describes the role of health workers in COVID-19 surveillance and acquires the necessary knowledge, skill, and attitude of basic surveillance strategies and methods to support active case search, contact tracing, alert investigation, and screening effectively.
Training Method	- Interactive PowerPoint presentation - Group-based learning: Group work, Exercises, Brainstorming, Plenary discussion - Case study, case scenario - Demonstration (session organization, vaccine administration, recording and documentation) - Reading
Training Material	- Printed materials: participant manual, facilitator guide, Powerpoint - Non- projected materials: Flip chart, writing board, marker - Projected materials: LCD, Laptop computer - Stationary materials: Notebooks, pens, papers, Flipcharts, and markers - M&E tools: - (print-out) - Infrared thermometer - PPEs supplies (face mask, sanitizer, etc.)
Participant Selection Criteria	The target audiences for this training includes EPI managers/ focal persons, nurses, health officers, midwives, and medical practitioners (it includes all health care providers involved in the provision of immunization services and facilitation of this course)
Trainer Selection Criteria	Health care providers, program managers involved in the development of this training package or trained health workers with basic COVID-19 vaccine and those who have experience in facilitating trainings
Method of Course Evaluation	Participant - Pre/post-course evaluation - Daily course evaluation (discussions, recaps, reflections) - Reflection from the trainers and trainees - Participant attendance

Certification Criteria	The participants need to score minimum 70% in post-course assessment and 100% attendance
Course Duration	2 Days
Suggested Class Size	Approximately 25-30 participants, with a trainer to trainee ratio of 1: 5-8
Training Venue	Convenient enough to accommodate participants and to conduct group exercises, role play/demonstrations, and presentations, well-ventilated and lighted, allow physical distancing, and PPE supplies available ■ This training will be delivered in accredited IST centers

Course Agenda

Topic/Activity	Time	Duration
Day One		
Registration, welcome address, and introduction of participants	8:30- 8:45 AM	15 mins
Pretest	8:45- 9:05 AM	20 mins
Background: basic facts about and epidemiology of COVID-19 disease	9:05- 9:25AM	20 mins
Rationale to introduce the vaccine	9:25-9:35AM	10 min
Supply Chain and waste management	9:35-10:00 AM	25 min
Tea Break	10:00-10:20 AM	20 min
Supply Chain and waste management cont….	10:20-12:30 PM	130 min
Lunch	12:30-1:30 PM	60 min
Adverse Events following immunization (AEFI) Surveillance	1:30-3:00 PM	90 mins
Demand promotion	3:00-3:30 PM	30 min
Tea Break	3:30-3:50 PM	20 min
Demand promotion	3:50 -5:50 PM	120 min
Day Two		
Recap Day one	8:30 -8:45 AM	15 min
Planning and Coordination	8:45 - 10:00 AM	75 mins
Tea Break	10:00-10:20 AM	20 min
Planning and Coordination cont….	10:20-10:35 AM	15 min
Service Delivery	10:35-12:35 PM	120 mins
Lunch	12:35-1:35 PM	60 min
Monitoring and evaluation	1:35-3:30 PM	115 mins
Tea Break	3:30 -3:50 PM	20 min
Monitoring and evaluation cont….	3:50-4:55 PM	65 min
General Discussions	4:55-5:30 PM	35 min

Session I

Basic facts on COVID-19 Pandemic

Session duration:20 minutes

Session description: The session discusses the natural features of COVID-19 diseases and describes their mode of transmission, clinical features, epidemiological background, and prevention and control of the disease pandemic.

For covid-19 disease the following information is provided:

- What the disease
- How it is spread
- The signs and symptoms
- The complications
- Management and prevention

By the end of the session, participants will be able to:

- Understand the basic facts about the SARS-CoV-2 disease
- Describe the COVID-19 global and National Epidemiology
- Understand the new nomenclature for different variants
- Explain the comprehensive prevention and control of the COVID- 19 pandemic

Training Methods

- Session introduction
- Self/group reading
- Brainstorming, and
- Discussion
- Summary by facilitators

M aterials Required

- Participant manual
- PowerPoint presentation

F acilitator Task

- Advance preparation for the session and updated information on the disease epidemiology,
- Read training material in advance
- Manage time according to the lesson plan
- Summarize key points after each session

Session Topics

- Introduction to COVID-19 disease
- Mode of transmission of COVID-19 disease
- COVID-19 illness clinical presentation
- COVID-19 disease epidemiology global, African, and Ethiopia
- Comprehensive prevention and control of COVID-19 disease

Introduction to COVID-19 disease

Brainstorming

- What do you know about COVID-19 disease?
- What do you know about methods of prevention?

Conclude the session by responding to the above questions

Coronaviruses are a large family of viruses that may cause illness in animals or humans. In humans, several coronaviruses are known to cause respiratory infections with symptoms ranging from the common cold to more severe diseases such as Middle East Respiratory Syndrome (MERS) and severe acute respiratory syndrome (SARS). The most recently discovered coronavirus, a severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), causes coronavirus disease 2019 (COVID-19). COVID-19 was unknown prior to the outbreak in Wuhan, China, in December 2019, but is now a pandemic affecting most countries globally. The epidemiology of COVID-19 is changing rapidly. As of October 28, 2022, globally, the total confirmed cases of COVID-19 reached over 625 million and above 6.5 million deaths. The first COVID-19 case in Ethiopia was reported on 13th March 2020. Subsequently, the government declared a five-month state of emergency in April 2020. As of October 28, 2022, Ethiopia reported 493,905 confirmed cases of COVID-19 and 7,572 deaths (CFR 1.53%).

Comprehensive prevention and control of COVID-19 disease :

The best way to prevent and slow down the transmission of COVID-19 is to be well-informed about the COVID-19 virus, the disease it causes, and how it spreads, through protecting against infection by washing your hands or using an alcohol-based rub frequently, not touching your face, and keeping physical distancing and covering the nose and mouth. Vaccines are one critical tool in preventing COVID-19- related illness. Generally, to prevent and to slow the transmission of COVID-19, the following practices are necessary :

- Vaccination against the COVID-19 virus
- Wash your hands regularly with soap and water or clean them with alcohol-based hand rub.
- Maintain at least a 1-meter distance between you and people coughing or sneezing.
- Cover your mouth and nose when coughing or sneezing.
- Stay home if you feel unwell.
- Practice physical distancing by avoiding unnecessary travel and staying away from large groups of people.

Wash your hands often

Wear a mask

Cover your coughs and sneezes

6 feet

2 jump ropes

Keep 6 feet of space between you and your friends

Session II
Rationale and objectives for COVID-19 Vaccine

Session duration: 10 minutes

Session description: This session aims to provide facts on the rationale and objectives of the COVID-19 vaccine introduction in Ethiopia.

Learning objectives

By the end of the session, participants will be able to:

- Describe the rationale for COVID-19 vaccine introduction in Ethiopia
- Explain the objectives for the COVID-19 vaccine introduction in Ethiopia

Facilitator task:

- Introduce the session, learning objectives, methodology, and session reading,
- Assess participants understanding of the rationale and objective of the COVID-19 vaccine introduction
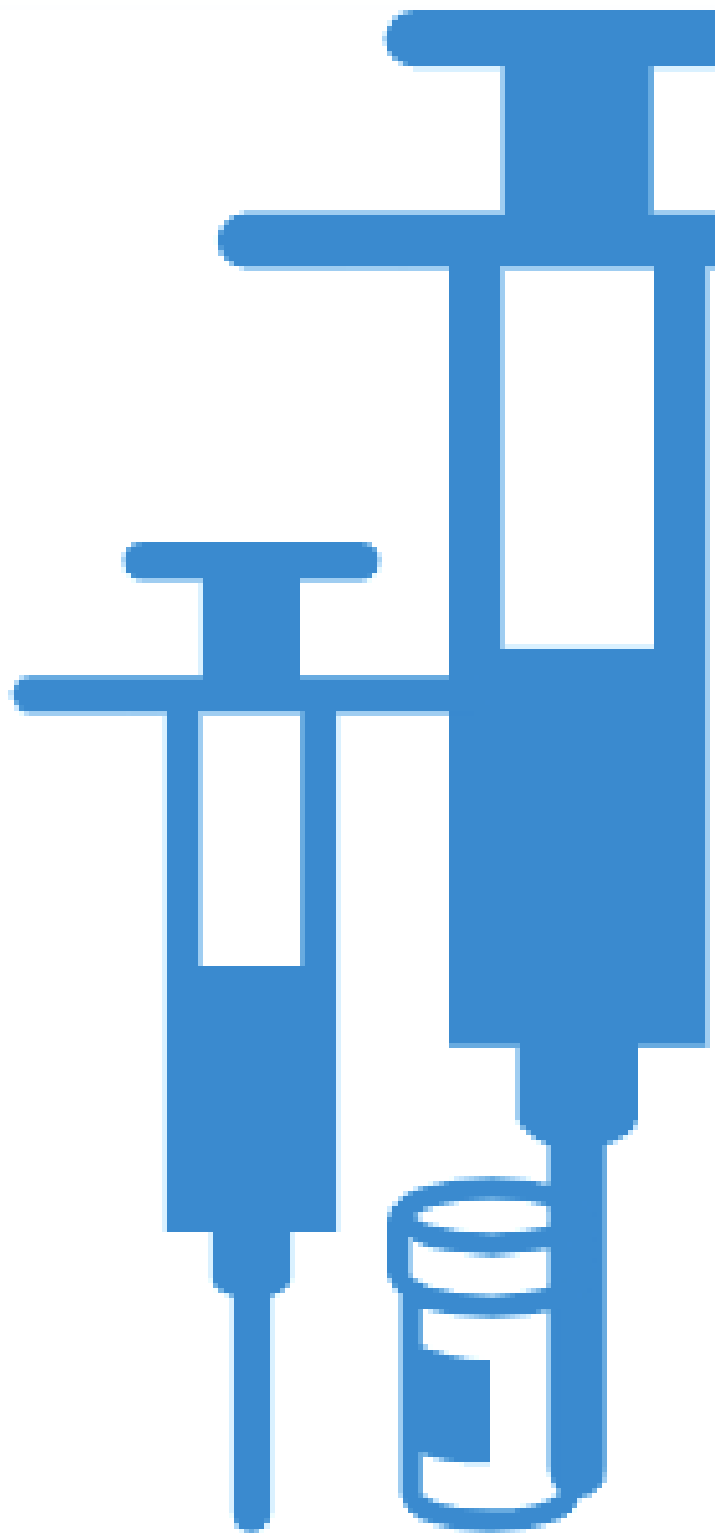
Session III
COVID-19 Vaccine supply chain and waste management

Session duration : 155 minutes

About session

This session describes the current global development on the COVID-19 vaccines, WHO EUL vaccines, forecasting and procurement, vaccine storage, handling, and cold chain management and stock management, and waste management.

Learning objectives

The primary objective of this session is to describe the current global development status on COVID-19 Vaccines and their logistic and supply chain management. By the end of this session, participants will be able to:

- Describe the COVID-19 vaccine landscape
- Describe WHO EUL COVID-19 vaccines and their characteristics
- Explain how to forecast the COVID-19 vaccine and associated supplies
- Describe COVID-19 vaccine stock management and distribution
- Describe the storage and handling of COVID-19 vaccines
- Describe the Management of waste associated with COVID-19 vaccination

Training methods

- Brainstorming
- Lecturette Videos
- Reading,
- discussion
- Exercises

Facilitator preparation

- First, carefully read the detailed lesson plan and understand the activities very well
- Read session 6 of the participant manual and other references
- Read the PowerPoint presentation
- Collect and prepare all necessary training materials and job aids in advance of the session

Materials and Training Aids

- Adequate number of Participant manuals,
- Facilitator guide, LCD, Laptop computer
- Pfizer vaccine preparation for administration video
- Flip charts and markers

Sessions of the modules

To make the facilitation of this module hands-on, the module has been conventionally divided into four parts.

S. N	Session Topics	Time allowed	Remark
1	COVID-19 VACCINE LANDSCAPE	5 Minutes	
2	WHO emergency use list vaccines	10 Minutes	
3	COVID-19 vaccine currently in use in Ethiopia	60 Minutes	
4	Precautions and recommendations for all EUL vaccine types	10 Minutes	
5	COVID-19 vaccines storage and handling	15 Minutes	
6	COVID-19 vaccine stock management	20 Minutes	
7	Cold chain requirement for COVID-19 vaccines	20 Minutes	
8	COVID-19 vaccines demand forecasting	15 minutes	
9	Distribution and delivery of COVID-19 vaccines	10 Minutes	
10	Management of waste associated with COVID-19 vaccination	10 Minutes	
	Total	155 Minutes	

COVID-19 Vaccine landscape and WHO Emergency Use List Vaccines (10 minutes)

- Display the learning objectives power point
- Display brainstorming questions and ask two volunteers to answer

- Ask the Participant to read sessions 3.1 and 3.2 of the participant manual
- Display and discuss the COVID-19 vaccines landscape from the power point.

COVID-19 VACCINE Currently Used in Ethiopia (60 minutes)

- Divide the participants into four groups
- Assign each group secretary and group leader
- For group 1 - AstraZeneca
- For group 2-Janssen
- For group 3 - Pfizer
- For group 4- Sinopharm

Precautions and Recommendations for All EUL Vaccine Types (10 minutes)

- Ask participants to read their manuals from, session 3.3 for 10 minutes
- Then display the summary ppt of session 3.3 and discuss it for 10 minutes
- Ask participants if they have any questions and entertain them accordingly

COVID-19 Vaccine handling, storage, and stock management (20 minutes)

- Display brainstorming questions and ask volunteers to answer
- Write down their answers on flip chart
- Display the summary ppt of this topic and discuss for 5 minutes
- Answer the brainstorming questions

- Read your participant manual for 30 minutes Prepare summary report onCOVID-19 Vaccine
- Type Target age group, Characteristics, Route, Formulation, Presentation, Dosage, Number of doses, Schedule, Handling procedures, Storage temperature and Shelf life
- The group leader presents the summary report to the large group within 5 minutes
- Thank all presenters

Cold chain equipment requirement for COVID-19 Vaccines (20 minutes)

- Display brainstorming questions and ask volunteers to answer
- Write down their answers on a flip chart Ask participants to read their manuals from session 3.4 for 5 minutes
- Display the summary ppt of this topic and discuss for 5 minutes
- Answer the brainstorming questions

Forecasting & Procurement of COVID-19 Vaccine & Supplies

(20 minutes)

- Display the Ppt on forecasting and procurement of COVID-19 vaccines and give general summary
- Divide participants in to four groups and allow them to do the exercise for 10 minutes
- Ask one volunteer from two group to present the answers of one of the questions.
- Demonstrate the exercise on the flip chart and let them compare with their answers.

Exercise

Adama City has a population of 3 million and plans to vaccinate 70 % of the population in the coming year. The current vaccine portfolio data shows, most of the vaccines in the pipeline are two doses per target within 4-12 weeks intervals and the estimated vaccine wastage rate is 10% and 5% for syringes and safety boxes.

Based on the given data: Calculate:

A. The total doses of the COVID-19 Vaccine

B. Syringes

C. and safety boxes are required to address the targets.

Answer

A. Target Population

$=3,000,000*0.7=2,100,000$

Vaccine requirement =Target Population*Number of does* wastage factor.

$=2,100,000 \times 2doses \times 1.11=4,662,000$

B. Syringe requirement =Target Population*Number of does* wastage factor.

$=2,100,000 \times 2doses \times 1.05=4,410,000$

C. Safety boxes

= (total number of syringes/100) *WF

$= (4,410,000/100) *1.05=46,305$

COVID-19 Vaccine Stock management and distribution

(10 minutes)

- Display brainstorming questions and ask volunteers to answer
- Write down their answers on a flip chart
- Ask participants to read their manuals from, session 6.6 pages……to …. for 10 minutes
- Display the summary ppt of this topic and discuss it for 5 minutes
- Answer the brainstorming questions

Management of Waste Associated with COVID-19 Vaccination

(10 minutes)

- Display the Ppt on Waste Management of COVID-19 vaccines and give a general summary…10 minutes
- Ask participants to do the exercise on Wastage Calculation for 5 minutes
- Ask one volunteer to answer the Wastage exercise on a flipchart for 5 minutes
- Cross-check the answers and demonstrate the Exercise on the flipchart
- Thank the Volunteer and Display the Session summary   5minutes
- Ask Participants for any clarity questions ……….5minutes

Example 4

Wastage rate Calculation Exercise

Bole Health Centre received 3000 doses of the AstraZeneca vaccine in 10-dose vials and about 2,670 individuals were immunized 1st dose and about 1,950 individuals were immunized 2nd dose and 650 were immunized to a booster dose.

There was a start balance of 2,500 doses leftover from previous Covid 19 Campaigns. Currently, the AstraZeneca Physical count is 1100 doses.

A. Calculate the AZ Wastage rate

B. Calculate the Wastage Factor.

Answer:

Given that: -

- Beginning balance=2,500 Doses
- Total received=3,000 Doses
- Total Administered does=2,670
- Remaining Balance=1,100 Doses

A. Calculate the AZ Wastage rate:

$$\text{Wastage rate} = \frac{\text{Number of doses discarded} \times 100}{\text{Start balance} + \text{received}}$$

Discarded Dose=BB + Received-Administered-Remaining Balance

=2,500+3,000-2,670-1,100=1,730

Wastage rate=31%

Wastage factor=100/69=1.45

Session IV

Adverse Events following immunization (AEFI) Surveillance

Session duration: 90 minutes
Session description: This session

Describes concepts of Adverse Events Following Immunization (AEFIs) monitoring for COVID-19 to enable the participants to acquire the necessary knowledge and skills to monitor and manage AEFIs.

Learning objectives

By the end of this session the participants will be able to;

- Define Adverse Events Following Immunization
- Differentiate serious and minor AEFI
  Describe the five categories of AEFIs

- Explain how to prevent the occurrence of ALFI
- Detect, manage and report COVID-19 vaccines related AEFIs
- Explain the importance of COVID-19 vaccine safety monitoring and response

Session Outline

- Definition and categories of AEFI
- Covid-19 vaccine related AEFI
- Prevention and management of AEFIAEFI
- surveillance, detection, reporting, the investigation, and communication
- Summary

Summary of Activity

S. No	Session	Method of delivery	Duration	Slide number	Material
1	Introduction to the session	PPT presentation	5 Minutes		- Computer - LCD projector - Flip chart - Plaster - Marker
2	Definition and categories of AEFI	Interactive lecture with PPT presentation, group exercise	20 Minutes		
3	COVID 19 vaccine related AEFI	Interactive lecture with PPT presentation	15 Minutes		

S. No	Session	Method of delivery	Duration	Slide number	Material
4	Prevention and management of AEFI	Interactive lecture with PPT presentation, brainstorming case study	20 Minutes		
5	AEFI surveillance, detection, reporting, investigation, and communication	Interactive lecture with PPT presentation	30 Minutes		
6	Summary	Interactive lecture with PPT presentation	5 Minutes		

Preparation before session

- Read the participant manual, facilitator guide the PowerPoints and other reference materials
- Prepare brainstorming ideas before the presentation

Session 4.1: Introduction to Session

In 2 minutes, introduce the description, outline, and objectives of the session by displaying them on the PowerPoint

Session 4.2: Definition and categories of AEFI

- Start the presentation by defining the AEFI by displaying the PPT slide
- Describe the categories of AEFI
- Display summarized categories of AEFI table XX
- Display the below table and follow the participants to assess themselves by matching the listed AEFI following COVID-19 vaccination with the likely causality categories

AEFIs following COVID-19 vaccination (hypothetical)	Likely Causality Category
Sweating and palpitations in an HCW following Covid-19 vaccination	A. Vaccine product-related reaction (As per published literature)
Febrile seizure one- post-AZ vaccination in a patient diagnosed with severe malaria.	B. Immunization anxiety-related reaction
Sudden onset of generalized purpura, petechiae, and ecchymosis in a 45-year-old, Female accompanied by severe abdominal pain, elevated D-dimer levels. Death one week after vaccination. Mesenteric venous thrombosis on autopsy.	C. Underlying or emerging condition(s), or condition(s) caused by exposure to something other than vaccines.

- Answer: 1.B, 2.C, 3.A

Session 4.3: COVID-19 Vaccine related AEFI

- Present slide and describe the known COVID-19 vaccines related to AEFI.
- Instruct to read the reports on the clinical trial and post-authorization use from the training manual on page xx to understand frequently reported systemic reactions for specific COVID-19 vaccines.

Session 4.4: Prevention and Management of AEFI

- Brainstorming on how to prevent and manage AEFI.
- Display slide and summarize the general principles on prevention and management of AEFI focusing on immunization error-related reactions.
- Display slide and tell participants the key features of anaphylaxis and how to differentiate it from syncope and fainting.
- Proceed to slide number XX and in two minutes ask two participants to respond to how to manage the case presented.

Case Study: 5.1

Time: 5 minutes	A 30-year-old female from Jimma town took the Janssen C-19 vaccine (First dose) around 10:00 in the morning. After 20 minutes of vaccination, she started to manifest wheezing, shortness of breath, uvular swelling along with tachycardia (PR=122 beats/min) and hypotension (Blood pressure of 80/50mmHg), epigastric pain, high- grade fever, headache, myalgia, chest pain, itching, cramping type of abdominal pain and rash starting from lower extremities which progressively involved all over the body.

Answer to the case study 5.1(Question number 1 and 2)

1. Anaphylaxis

2. Adrenaline (1:1000) preparation, IV fluids preferably Normal Saline (NS) at least three bags, IV cannula, Syringe with a needle, Plaster, BP cuff,

Session 4.5: AEFI surveillance, detection, reporting, investigation, and communication

- Ask the participants to define AEFI surveillance?
- Summarize participant's reflections and present the standard definition of AEFI surveillance and its objective
- Provide a sticky notepad for participants /groups and ask them to write down the components of the AEFI surveillance cycle. and post on the classroom wall sequentially to make a full cycle of sticky notes.
  Present the correct AEFI surveillance cycle and move to the next slide
- Present slide and briefly describe the detection, notification, and reporting

- Print and distribute reporting formats to participants/groups
- Based on the

Case study 4.6: Ask the participants to answer question number 3,4 and 5. Answer to Case Study 5.1 (for question number 3&5)

(3) The vaccinator should be reported to Jimma health center

(4) Reportable variable: Name, Address, sex, age, reporter name, Vaccine name and expire date, batch number, date and time of vaccination, dose, Description of the AEFI, date of AEFI onset, seriousness, outcome

Available variable: Age, sex, vaccine name, time of vaccination, the onset of AEFI, and description

(5) Invite two groups to present the completed report form and discuss it

Session 5: Summary

- Take 5 minutes and summarize key points of the session using the PPT slide number XX
- Invite to ask any unclear questions

Session V

DEMAND GENERATION/ PROMOTION & RISK COMMUNICATION

Total time allocated: 150 minutes

Primary Objective

By the end of this session, participants will be able to describe the effective communication methods, demand promotion strategies and approaches, and Risk and Crisis communication for successful COVID- 19 vaccine implementation.

Enabling Objective

- After completing this session, participants will be able to:
- Describe the importance of communication for the COVID-19 vaccine implementation
- Describe and identify COVID -19 vaccine demand promotion strategies and approaches Identify the target audience for advocacy, social mobilization, program communication, and risk/crisis communication for the COVID-19 vaccine implementation
- Develop skills to effectively communicate with community members and stakeholders about the COVID-19 vaccination,
- Promote the acceptance of COVID-19 vaccines and other routine immunization among the communities.

Session Outline

- Introduction to communication/demand generation
- Demand generation/promotion strategies for Covid-19 vaccination
- Demand generation/promotion approaches for Covid-19 vaccination Advance
- Risk/crisis communication about COVID-19 vaccines

Material

- Flip Chart and Markers
- LCD Projector and Laptop
- Participant manual
- Trainer's guide

Training Methods

- Brainstorming
- Session introduction using PPT
- Discussion and plenary session
- Group activities: Role plays and group works

Introduce the session to participants and explain the learning objectives using power point or flipchart

Facilitator Preparation

- Carefully read the detailed lesson plan and understand the activities very well
- Read session 5 of the participant manual and other references
- Read the PowerPoint presentation
- Collect and prepare all necessary training materials and job aids in advance of the session
- Prepare necessary information on a flip chart (if LCD is not applicable)

S.No	Activity	Methdod of Delivery	Time	ppt Slide No.
1	Basics of Communication and demand promotion	Brainstorming (5 min) and demand promotion Interactive presentation (15 min)	20 Minute	
2	Demand generation/promotion strategies on Covid-19 vaccination	Brainstorming (5 min) and demand promotion Interactive presentation (10 min)	20 Minute	
3	Demand generation/promotion approaches on Covid-19 vaccination	Brainstorming (5 min) Interactive presentation (20 min) Group activity/Role play (40 min)	60 Minute	
4	Risk/crisis communication on Covid-19 vaccination	Brainstorming (10 min) Interactive presentation (20 min) Group activity and discussion (20 min)	50 Minute	

5.1. Basic of Communication and Demand promotion

Allocated time: 20 minute

- Tell the participants to read session 5.1 of the participant's manual on basics of communication and ask the following brainstorming questions and discussing them.
  - What is communication?
  - What are the principles of effective communication?
- Based on the reflections of the participants summarize the basic concept of communication and principles of effective communication
- Allow participants to ask questions as well as to add more points
- Entertain the questions raised and summarize the session and proceed to the Communication gaps on Covid-19 vaccines Brainstorm the participants by asking the following question
  - What are the major communication gaps on the Covid-19 vaccine that you encountered during the implementation of Covid-19 vaccination?
- Allow the participants to discuss and list out the major communication gaps in Covid-19 vaccine uptake
  Summarize the session by addressing the main communication gaps on the Covid-19 vaccine

5.2. Demand Generation /Promotion Strategies

Allocated time: 20 minute

Start the topic by asking about demand generation/promotion strategies and raise the following brainstorming questions and allow the participants to discuss them.

- What are the major demand generation / communication strategies?

Summarize the reflections of the participants and provide a general overview of the three major demand generation/promotion strategies in Covid-19 vaccination.

5.3. Demand Generation Approach
Allocated time: 60 minute

start the topic by asking the following brainstorming questions and discussing them. (5 minutes)

- Mention the major demand generation/promotion approaches used to achieve high acceptance and uptake of COVID-19 vaccines.

Based on the reflections of the participants, present and discuss, especially the main types of communication interactions that occur within a provider-client relationship and key elements of interpersonal combination/IPC/.

Case scenario on interpersonal communication

- Divide the participants into four groups
- Allow the participants to read the case scenario for 5 minutes from the participant manual
- Provide adequate time for role play (15 min)
- Select two groups and invite them to demonstrate the role play (5 minutes for each group)
- After the end of both roles, plays ask participants: (5 minutes)

  Q.1: "Does the health care worker communicate to the mother and student

  clearly and effectively?"

  Q.2: What information the health worker shared with the mother and student? Was

  it helpful? How would you do things differently?

  Q.3. Do you come across such challenges?

  How you have addressed such an issue?

  Final reflection on the role play (5 min)

- Present the PowerPoint on demand generation/ promotion approaches and summarize the session. (15 minutes)

5.4. Risk and crisis communication
Allocated time: 20 minute

Start the topic by asking the following brainstorming questions and discussing it. (5 minutes)

- *What is risk and risk communication?*
- *What is a crisis and crisis communication?*

Based on the reflections of the participants, present and discuss on risk, risk communication, crisis, crisis communication and reasons for crisis in immunization program including Covid-19 vaccine.

Group Work

- Explain to the participants to discuss with their side mates the group work (three participants in each team)
- Present the group work questions (5 minutes)

  The Questions are:

  1. What kind of crisis occurred during the last Covid-19 vaccination rollout/ campaigns in your area/region? (May be related to AEFI or other conditions)

  2. What measures were taken to manage the incident?

  3. Who engaged in the response?

- Provide adequate time for the group work (5 min)
- Select five teams to present (2 minutes for each group)

  Final reflection on the group work (5 min)

  Present the PowerPoint to the management of risk/crisis and summarize the session. (20 minutes)

Session VI

Coordination and planning for COVID-19 Vaccine

Session duration : 90 minutes

Primary objectives

By the end of this session participants will be able to describe the overall COVID-19 vaccine rollout planning and coordination mechanism

Enabling objectives

After completing this session, the participants will be able to:

- Explain the required coordination mechanisms for COVID-19 vaccine rollout
- Describe the COVID-19 vaccine rollout micro-planning and preparation process
- Outline the important planning components for the COVID-19 vaccine rollout

Activity	Method of delivery	Time	PPP slide No.
COVID-19 vaccination coordination mechanism	Interactive presentation	20 minutes	6
Micro-plan development process	Brainstorming (10 min) Interactive presentation (20 min) Group activity and discussion (60 min)	70 minutes	7-17

Materials

- Flip Chart and Markers LCD
- Projector and Laptop Participant
- Manual Trainer's guide
- Print out MP template

Activity 1: COVID-19 vaccination coordination mechanism

- Ask general question about the existence of coordination mechanism in the area (Give chance to 2 person)
- Encourage participants to respond
- Present the power points and discuss on the coordination mechanism

Activity 2: Micro-plan development process

- The facilitator will ask the brainstorming question to the participants & allow them to respond.
- Present the power points and discuss the Micro-plan development process

Micro-planning group exercise

- Divide the participants into five groups and give the MP template for each group
- Allow the participants to read the case scenario for 5 min from the participant manual.
- Provide adequate time for group discussion 20 min
- Group presentation for each group to present (5 min each group)
- Help them to use flip chart
- Final reflection (10 min)

Session VII

Vaccine delivery strategies

Session duration: 120 minutes

Primary Objective

By the end of this session participants will be able to describe the COVID 19 vaccination delivery strategies and organizing vaccination sessions.

Enabling objectives

By the end of the session, participants will be able to :

- Identify vaccine delivery strategies for the different priority groups
- Outline how to organize COVID-19 vaccination sessions
- Demonstrate COVID-19 vaccine administration

Summary of activities

Activity	Method of delivery	Time	Slide No.
Vaccine delivery strategies	Think, Pair & Share (10 min) Interactive presentation (25 min)	35 minutes	
Organizing COVID-19 vaccine session	Group activity and discussion (15 min) Interactive presentation (20 min)	35 minutes	
Vaccine administration	Interactive presentation (20 min) Demonstration (30 Min)	50 min	

Materials

- Flip Chart and Markers
- LCD Projector and Laptop
- Participant manual, Trainer's guide

- Demonstration materials
- Doll/Sponge/orange
- Vaccine & Syringe, Safety box , Glove

Activity 1: Vaccine delivery strategies

- Ask the participant to be paired, discuss on the general question, and reflect about the vaccine delivery strategies
- Encourage participants to respond
- Present the power points and discuss on the coordination mechanism

Activity 2: Organizing COVID-19 vaccine session

- The facilitator will ask the participant to discuss with the closer person and allow them to respond.
- Present the power points and discuss on how to organize COVID-19 vaccine session.

Vaccine administration

- Present the power point presentation
- Divide the participants into five groups and give demonstration materials for each group
- Allow the participants to demonstrate vaccine administration.
- Final reflection
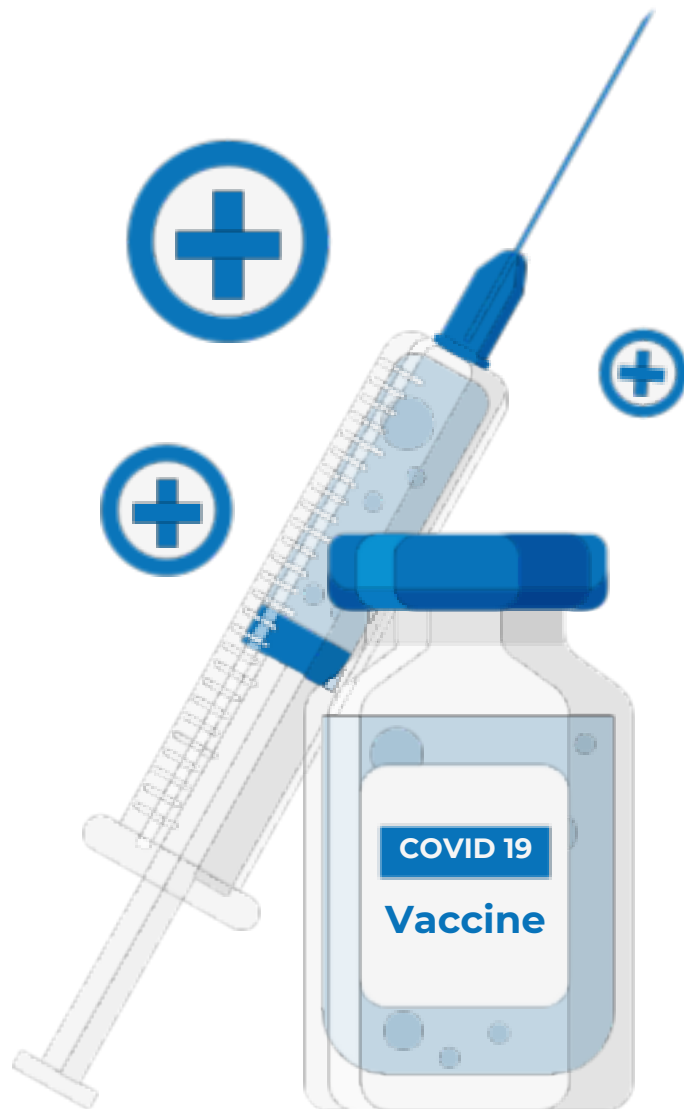
Session VIII

Monitoring and evaluation of COVID-19 Vaccination

Session duration: 180 minutes
Session description:

This session describes the importance of monitoring and evaluation during the COVID-19 vaccine introduction to enable the participants to acquire the necessary knowledge, skills, and attitude to monitoring and evaluation of the COVID-19 vaccine introduction. This section also discusses the major monitoring indicators and tools to be used during the COVID-19 vaccine introduction.

Learning Objective:

- By the end of this session, the participants will be able to:
- Describe monitoring and evaluation approaches to COVID-19 vaccination
- Explain and use the set indicators for COVID 19 vaccine monitoring
- Describe and use COVID-19 vaccination campaign monitoring system
- Identify and use the COVID-19 vaccine monitoring and evaluation tools

Session Outline:

- Introduction to the COVID-19 vaccine monitoring
- Indicators to monitor COVID-19 vaccination progress
- COVID-19 Vaccination Monitoring Tools
- COVID-19 Vaccination campaign monitoring
- Evaluation of COVID-19 vaccine rollout

S.no	Session	Method of Delivery	Duration	Material
1.	Introduction to the session	PPT Presentation	5 Minutes	
2	Introduction to the COVID-19 Vaccine	Brainstorming activity PT presentation	20 Minutes	▪ Computer ▪ LCD projector ▪ Flip chart ▪ Plaster ▪ Marker ▪ Participant manual ▪ COVID-19 vaccination recording and reporting tools ▪ COVID-19 vaccination data management SOP
3	Indicators to COVID-19 vaccination progress	Brainstorming activity monitor PPT presentation Group Exercises (case studies)	40 Minutes	
4	COVID-19 vaccination monitoring tool	Brainstorming activity monitor PPT presentation Group Exercises (case studies)	65 minutes	
5	COVID-19 Vaccination campaign monitoring	Interactive lecture with PPT presentation, brainstorm case	15 minutes	
6	Review Meeting	PPT presentation	5 minutes	
7	Supportive supervision	PPT presentation	5 minutes	
8	Evaluation of COVID-19 vaccine rollout	Interactive lecture with PPT presentation	15 Minutes	
9	Summary	PPT presentation 10 Minutes Question and answer	10 Minutes	

Preparation by the facilitator for this session:

▪ Read Session 8 (monitoring and evaluation of COVID-19 vaccination session) of the participant manual, power points, facilitator guide, and other reference materials

▪ Prepare a lesson plan and training materials for practical exercise with a case scenario

▪ Prepare brainstorming ideas before the presentation

▪ Learning method: Plenary presentation, individual /group reading, group discussion/exercise,

8.1. Introduction to COVID-19 vaccine monitoring

Allocated time: 20 minutes

- Tell the participants to read session 8.1 of the participant's manual on introduction to COVID-19 vaccine monitoring and ask the following brainstorming questions and discuss it.
    - What is monitoring?
    - Why do we monitor COVID-19 vaccination?
- Based on the reflections of the participants summarize the basic concept of monitoring and why COVID-19 vaccination monitoring is important.
- Allow participants to ask questions as well, as to add more points.
- Entertain the questions raised and summarize the session and proceed to the COVID-19 vaccination monitoring system.
- Brainstorm the participants by asking the following question

Do you know any COVID-19 vaccination monitoring systems?

Allow the participants to discuss and list out the approaches to monitoring COVID- 19 vaccination.

Summarize the session addressing the main monitoring approaches

8.2. Indicators to monitor COVID-19 vaccination progress

Allocated time: 60 minutes

- Tell the participants to read session 8.2 of the participant's manual on indicators to monitor COVID-19 vaccination progress and raise the following brainstorming questions and allow the participants to discuss it.
    - What is Indicator?
    - Which COVID-19 vaccination indicator do you know?

Summarize the reflections of the participants and provide a general overview of the COVID-19 vaccination indicators.

Vaccine uptake and coverage monitoring

- Ask participants about the difference between uptake and Coverage. Explain the difference with an example
- Summarize and explain the core COVID- 19 coverage indicators and their data sources. Proceed to the COVID-19 vaccine supply indicators.

Vaccine supply and logistic indicators

Start the sub-session by raising the following brainstorming questions and allow the participants to discuss it

- How do you calculate Vaccine wastage rate?

Summarize the reflections of the participants and explain the core vaccine supply indicators and their data sources.

Demand promotion and communication indicators

Raise the following brainstorming questions and allow the participants to discuss them.

- What is the importance of monitoring demand promotion and communication indicators?

Summarize the reflections of the participants and provide the general overview about the core demand promotion and communication indicators with their data sources

Vaccine Safety (AEFI) Monitoring and Surveillance Indicators

Start the sub-session by raising the following brainstorming questions and allow the participants to discuss over it

- What is the importance of monitoring AEFI indicators?
- Which AEFI indicators do you know?
- How do you monitor COVID-19 morbidity and mortality?

Summarize the reflections of the participants and provide a general overview of the core AEFI and COVID-19 surveillance indicators with their data sources

Planning, coordination, related Indicators and system

Explain the importance of monitoring planning coordination and system related indicators to the participants

Summarize the session by explaining core planning, coordination, and system related indicators

Group Exercise

- Organize the participants in a group Support groups to undertake the exercise
- Tell the participants to read the group exercise questions from the participants manual
- Summarize and discuss the answers with participants
  Allow participants to raise questions or additional points

Answer:

1. 15000 doses administered

2. 9000 individual completed the primary series

3. Vaccine uti.rate= 15000/(2000-4600)*100=97%

 Vaccine wastage rate=100-97=23%

Vaccine Wastage Factor=100/100-23=1.3%

8.3.COVID-19 Vaccination monitoring Tools

Allocated time: 90 minutes

Tell the participants to read session 8.3 of the participants' manual on COVID-19 vaccination monitoring tools and ask the following brainstorming questions and discuss them.

- What should we consider in recording and reporting COVID-19 vaccination data?

Based on the reflections of the participants summarize the basic data collection and reporting principles of COVID-19 vaccination

Allow participants to ask questions as well as to add more points.

Entertain the questions raised and summarize the session and proceed to the COVID-19 vaccination recording tools

Start the topic by brainstorming question

- List and explain the recording and reporting tools used for COVID-19 vaccination.

Based on the reflections of the participants summarize the main recording and reporting tools for COVID-19 vaccination.

8.3.1. COVID-19 vaccination card

- Explain the importance of the COVID-19 vaccination card, who updates the card, where to keep the card, and when to use the vaccination card
- Discuss the steps to be used to complete the COVID-19 vaccination card
- Read and explain the data elements in the vaccination card

8.3.2.COVID-19 Vaccination register

- Explain the importance of the COVID-19 vaccination register, who updates the register, where to keep the register, and when to use the vaccination card
- Discuss the steps to be used to complete the COVID-19 vaccination card
- Discuss the procedures for using the COVID-19 vaccination register
- Read and explain the participant manual on how to record information in the register and explain each data element in the register

8.3.3. COVID-19 vaccination Tally sheet

Start the topic by raising the following brainstorming questions

- What is the purpose of the tally sheet?
- When should we tally COVID-19 vaccination data?

Based on the reflections of the participants summarize the use of the tally sheet, when who updates the tally sheet.

Explain the procedures for tallying COVID-19 vaccination data

> **Notes to the facilitator**
>
> - Tally ALL vaccinations are given to ALL populations including special population groups by age and sex disaggregation, then Tally the number of special population groups (Health workers, IDPs, refugees, people with disability, and people with a medical condition) vaccinated out of the total vaccination
> - Doses administered should be tallied immediately after administration (and not before or much later)

8.3.4. COVID-19 vaccination daily reporting forms

- Explain to the participants the importance of the COVID-19 vaccination daily reporting format and the data flow
- Discuss the steps to be used to complete and submit daily vaccination report

- Explain the contents of the daily reporting format
- Read and explain the participant manual on how to record information in the register and explain each data element in the register.

8.3.5.DHIS2 aggregate reporting module

- Explain to the participants about DHIS2 aggregate reporting module
- Emphasize that DHIS2 is the primary reporting tool for COVID-19 vaccination data
- Inform participants that, aggregated data from each vaccination site will be compiled and entered into DHIS2 on daily basis

8.4.COVID-19 Vaccination campaign monitoring

Start the topic by forwarding the following brainstorming questions

- What makes mass campaign vaccination from routine vaccination?
- When should we monitor campaigns?

Based on the reflections of the participants summarize the importance of the COVID-19 vaccination campaign monitoring

Explain to the participants the different phases of COVID-19 vaccination campaigns monitoring

- Pre-campaign phase monitoring activities
- Intra Campaign phase monitoring activities
- Post Campaign phase monitoring activities

8.5. Review meetings (5 minutes)

Explain the importance and procedures of review meetings in COVID-19 vaccination monitoring

8.6. Supportive Supervision (5minutes)

Explain the importance and procedures of supportive supervision in COVID-19 vaccination monitoring

8.7. Evaluation of COVID-19 vaccine rollout (15 minutes)

Start the topic by forwarding brainstorming question

- What is Evaluation? What makes it different from Monitoring?

Explain and discuss the evaluation activities in COVID-19 vaccination evaluation Summarize the M&E session by reminding the following points (10 minutes)

- The COVID-19 vaccination monitoring system is designed to measure equitable uptake and coverage over time by geography, and high-risk population groups
- Administrative reports, supportive supervisions, review meetings, and surveys are the main monitoring and evaluation systems for COVID-19 vaccination
- Vaccination cards, immunization registers, tally sheets, AEFI forms, daily reporting formats, and the DHIS2 system is the main recording and reporting tools for COVID-19 vaccination monitoring
- Every single vaccination data should be recorded in the COVID-19 registration book, and tally sheet and reported through the daily reporting form and DHIS2
- The COVID-19 vaccination campaign should be monitored during the pre-campaign, intra-campaign, and post-campaign phases
- Core coverage, demand promotion, vaccine logistics, AEFI, surveillance, and other system-related indicators should be analyzed and interpreted on a regular basis for timely and evidence-based decision-making.

Annex: 1 Course Assessment questions

1.   Which of the following methods is not effective for the reduction in the transmission of COVID-19 disease?

A.Vaccination

B.Wearing masks

C.Prophylaxis with anti-viral medication

D.Physical distancing

2.   Eradication of the COVID-19 virus is the main rationale behind the introduction of COVID-19 vaccines?

A.True

B.False

3.   Intra-sectoral and multi-sectoral coordination mechanism is crucial for COVID-19 vaccination rollout at all levels of the health system.

A.True

B.False

4.   Which one of the following is not the key consideration to conducting a Kebele-level micro plan?

A.Target population

B.Cold chain inventory

C.Identifying service delivery strategies

D.Developing operational map

E.Knowing the target population of the neighboring Kebele

5.   Kebele ''X '' has a total population of 10,500 from this, 1,500 targets received Astra Zeneca's first dose and 825 targets completed the primary vaccination series. Kebele ''X'' has the plan to vaccinate the target population through the campaign. What would be the total target for 1st, the 2nd, and Booster doses respectively? Use this conversion factor =62.3 %.

A.   6510,825,675

B.   6615,675,825

C.   5042,675,825

D.   6563, 825,675

6.   Which of the following service delivery strategies is not more applicable for hard-to-reach/hard-to-serve areas/communities?

A.Static/Fixed

B.Temporary fixed

C.Outreach

D.Mobile

7. During preparation for the vaccination session, which one of the following would not be the most important?

A.Knowing the team composition & target for the session

B.Applying Infection prevention technique

C.Mapping of Session organization

D.None of the above

8. Which of the following are the recommended practices during COVID-19 vaccine administration?

A.Checking the expiry date of the vaccine

B.Ensure the right match for a vaccine with diluent as per the manufacturer's recommendation

C.Discard the used needle and syringe without recapping them in the safety box

D.Label each vaccine vial with the date and time immediately when opened

E.All of the above

9. Which of the following COVID-19 vaccines is an mRNA vaccine?

A.Astra Zeneca

B.Sinopharm

C.Pfizer

D.Johnson & Johnson

10. At the health facility level all COVID-19 vaccines can be stored at +2°C to +8°C, and maintain the original shelf life indicated by the manufacturer

A.True

B.False

11. Kirkos Sub City has a population of 2 million and plans to vaccinate 67% of the population in the coming year. The current vaccine portfolio data shows, most of the vaccines in the pipeline are two doses per target within 4-12 weeks intervals and the estimated vaccine wastage rate is 10% and 5% for syringes and safety boxes. Based on the given data: What would be the total doses of COVID-19 Vaccine, syringes, and safety boxes required to address the targets?

.2,814,000 Doses, 2,977, 7782, syringes and 29,547 safety boxes

B.2,977,778 Doses, 2,814,000, syringes and 2,814 safety boxes

C.2,977,778 Doses, 2,814,000, syringes and 29,547 safety boxes

D.2,977,778 Doses, 2,814,000, syringes and 2,954 safety boxes

12. Millennium Health Centre received 2,800 doses of the Pfizer vaccine in October 2022. The coverage report indicated that 1,200 clients were getting vaccinated with Pfizer Vaccine. There was no start balance and by the end of October 2022, the stock level was 1,400 doses. Calculate and discuss vaccine wastage.

A.7%

B.3%

C.6%

D.2%

13. Which of the following is not a cause for AEFI?

A.Vaccine product-related reactions

B.Immunization anxiety-related reactions

C.Coincidental events

D.Vaccine quality defect-related reactions

E.None

A14. Which of the following is not a serious AEFI?

A.AEFI that resulted in the death

B.AEFI that resulted in minor swelling and redness at the injection site

C.AEFI that resulted in disability/incapacity

D.AEFI that resulted in hospitalization

15. Which of the following is not a cause for program error related to AEFI?

A.Nonsterile injection

B.Reconstitution error

C.Injection at incorrect site

D.Inadequate inactivation of live viruses by the manufacturer

16. One of the following is not the Role of Health Care worker in community communication on AEFI

A. Communicate immediately with the MoH and other high officials.

B. Provide the parents with information

C. Reassure parents, caregivers, and adults that necessary measures are being taken

D. Communicate the results of the investigation to the media

17. One of the following is not correct about the COVID-19 communication activities to be conducted by HWs

A. To inform the risk of COVID-19 infection to all clients in any opportunities

B. To inform all sources of information are credible about the COVID-19 vaccine

C. To incorporate the issue of COVID-19 in the routine HF education sessions

D. To engage religious leaders and community influential to promote about COVID-19 vaccine

18. Which of the following is not a demand generation strategy

A. Advocacy

B. Social mobilization

C. Program Communication

D. Social Listening

19. Which of the following tool is important for COVID-19 vaccination monitoring?

A. COVID-19 vaccination register

B. COVID-19 vaccination tally sheet

C. COVID-19 vaccination daily reporting form

D. All the Above

20. When should health workers tally COVID-19 vaccination data?

A. Before administering the vaccine

B. After completing the daily vaccination session

C. Immediately after administering the vaccine

D. When the opened vial is completed

21. Which of the following is an indicator for COVID-19 Vaccination Monitoring?

A. Vaccination Coverage

B. Number of people reached through media for COVID-19 Vaccination information

C. Number of Weredas completed COVID-19 vaccination micro plan

D. Vaccine Wastage Rate

E. All of the Above

 Answer Key:- 1. C2. B 3. A 4. E5. C 6. A 7. D 8. E 9. C10. B 11. C 12. A13. E 14. B 15. D16. D 17. B 18. D19. D 20. C

21. E

ጤና ሚኒስቴር - ኢትዮጵያ
MINISTRY OF HEALTH · ETHIOPIA

የጤነኛ ጤና ለሃገር ብልፅግና!
HEALTHIER CITIZENS FOR PROSPEROUS NATION

Covid-19 Vaccination Training
Facilitator Manual

October, 2022