

Planning for the Deployment of Pandemic Influenza Vaccine

*Report of a Regional Workshop
WHO-SEARO, New Delhi, 14–18 September 2009*



**World Health
Organization**
Regional Office for South-East Asia

SEA-Immun-58
Distribution: General

Planning for the Deployment of Pandemic Influenza Vaccine

*Report of a Regional Workshop
WHO-SEARO, New Delhi, 14–18 September 2009*



© **World Health Organization 2010**

All rights reserved.

Requests for publications, or for permission to reproduce or translate WHO publications – whether for sale or for noncommercial distribution – can be obtained from Publishing and Sales, World Health Organization, Regional Office for South-East Asia, Indraprastha Estate, Mahatma Gandhi Marg, New Delhi 110 002, India (fax: +91 11 23370197; e-mail: publications@searo.who.int).

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by the World Health Organization in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

All reasonable precautions have been taken by the World Health Organization to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall the World Health Organization be liable for damages arising from its use.

This publication does not necessarily represent the decisions or policies of the World Health Organization.

Printed in India

Contents

	<i>Page</i>
<i>Acronyms</i>	<i>v</i>
<i>Executive summary</i>	<i>vii</i>
1. Background.....	1
2 Regional workshop on planning for the deployment of pandemic influenza vaccine.....	1
3 Proceedings of the workshop.....	2
Session 1: Epidemiology of influenza and general introduction to the vaccine deployment guidelines.....	2
Session 2: Introduction to guidelines	4
Session 3: Managing deployment efforts.....	5
Session 4: Legal and regulatory planning issues.....	6
Session 5: Information and communication management.....	7
Session 6: Human resource and security.....	8
Session 7: Supply chain logistic processes.....	9
Session 8: Introduction to logistic planning tool	10
Session 9: Waste management and injection safety	11
Session 10: Termination of deployment.....	12
4. Closing session.....	12

Annexes

1. List of participants	13
2. Programme	16

Acronyms

COL	chief of logistics
IC	incident commander
ICS	incident command system
PI	pandemic influenza
PIPP	pandemic influenza preparedness plan
PIVDP	pandemic influenza vaccine deployment plan

Executive summary

A workshop was held in the WHO Regional Office for South-East Asia (SEARO), New Delhi from 14-18 September 2009, to help Member States prepare for planning for deploying pandemic influenza vaccine within seven days of receipt at the national level. All countries in the SEA Region have developed pandemic influenza preparedness plans. However, rapid vaccine deployment had not been adequately addressed in these plans.

After an initial introduction to influenza epidemiology, the facilitators briefed the participants on the legal implications of using a new vaccine, and worked through the details of the command and control structures and logistic mechanisms that will be necessary to achieve rapid and effective deployment of a vaccine in any pandemic situation.

Participants also interacted on security issues, on vaccine waste management and the procedures for termination of deployment. The importance of documenting experiences was emphasized. Participants also familiarized themselves with a logistic tool (based on MS-EXCEL) developed at WHO-Hq to estimate vaccine and logistic needs.

The participants identified constraints to rapid vaccine deployment plans and suggested various solutions. All countries agreed that rapid vaccine deployment was feasible, but a prior vaccine prioritization plan was needed for successful implementation. In addition, participants identified the key follow-up actions to ensure that Member States are prepared for the deployment of pandemic influenza vaccines.

1. Background

Pandemic influenza outbreaks have taken millions of lives in the past. Subsequent to the novel A/H1N1 outbreak in 2009 in Mexico and its steady spread the world is now in the midst of a H1N1 influenza pandemic. Although overall mortality rates have remained low, young adults bear a disproportionate share of the mortality burden and the future behaviour of the virus remains uncertain.

In countries of the Region, systematic surveillance for influenza is limited and seasonal influenza vaccine is not used routinely except in Thailand. The lack of data on prevalence of disease is often taken as evidence of absence of the disease and consequently influenza is not considered a significant public health issue. However, a prospective surveillance study in Thailand showed that seasonal influenza is an important public health problem and subsequently Thailand introduced seasonal influenza vaccination for those above 65 years of age and suffering from some chronic conditions.

All Member States of the Region have already developed influenza pandemic preparedness plans (PPP) that define the necessary actions and responsibilities. However, most countries had not included a vaccine deployment plan in these PPPs as vaccines for the novel A/H1N1 strain were not available at the time when the plans were developed. Vaccines for the novel A/H1N1 pandemic influenza are now available in some parts of the world and in the near future, will likely be available or manufactured in SEAR countries too. Each Member State is expected to incorporate the vaccine deployment¹ plan into the main PPP well in advance of the arrival of the influenza vaccine.

2 Regional workshop on planning for the deployment of pandemic influenza vaccine

A workshop was held in New Delhi in the WHO Regional Office for South-East Asia (SEARO) in New Delhi from 14-18 September 2009, to prepare

¹The movement and use of a pandemic influenza vaccine, including any pharmaceuticals and other items that may be required to reduce the impact or severity of influenza infections, once they are available in a country.

the Member States of the Region for the deployment of pandemic influenza vaccine.

The **specific objectives** were:

- (1) To agree to a framework for developing detailed procedures to deploy a pandemic influenza vaccine and other ancillary products within seven days of reaching the country;
- (2) To share information on how to plan and then establish surge capacity² to deploy vaccine and ancillary items in seven days;
- (3) To describe and discuss core management activities for logistics, waste management, human resources, security and information and communications; and
- (4) To provide guidance on how to conduct a simulation exercise to test deployment and execution capacity of the deployment plan.

All Member States except Myanmar participated in the workshop. In addition WHO EPI staff posted in the countries also participated. The list of participants is available in Annex 1 and the detailed programme is in Annex 2. Dr Myint Htwe, Director, Programme Management, SEAR/WHO inaugurated the workshop. Dr Paba Palihawadana, Chief Epidemiologist, Ministry of Health Sri Lanka, chaired the meeting with Dr ASM Alamgir, Virologist, IEDCR, Ministry of Health and Family Welfare People's Republic of Bangladesh. Dr Thitipong Yingyong from Ministry of Public Health, Thailand served as the Rapporteur.

3 Proceedings of the workshop

Session 1: Epidemiology of influenza and general introduction to the vaccine deployment guidelines

Dr Peter Carrasco, Policy Adviser – Vaccine Security, WHO/Hq gave a general introduction to the current global status of pandemic influenza and a brief overview of the vaccine deployment guidelines. He clarified that the guidelines are suitable for any pandemic response with a vaccine and are

² The ability to call forth the additional resources and capabilities required to respond to an emergency such as a pandemic.

not specific for H1N1 pandemic influenza vaccine. In fact, the initial stimulus for developing the guidelines and the logistic planning tool (an MS-EXCEL based interactive tool) was the expected H5N1 pandemic and not the H1N1 pandemic which eventually occurred. He outlined the core concepts in developing a deployment plan as: pre-event planning, planning for surge, exercises to test country deployment capacity, core management activities and command and control structures.

Dr Madhu Prasad Ghimire, Medical Officer, CDS/SEARO presented the regional situation of the novel H1N1 influenza pandemic. He highlighted the varying status of influenza epidemiology in the 11 Member-countries of the SEA Region. While Thailand and India have the largest number of cases and deaths, all countries except (DPR Korea) have reported cases. The intensity and impact of the pandemic in the Region has been low to moderate. Interpretation of surveillance data should take into account that the sensitivity of surveillance information and strategies that are adopted to collect information are not uniform across the Region, The vaccine production capacity in the Region is very encouraging with three member countries (India, Indonesia and Thailand) having vaccine manufacturing capabilities.

In developing country-specific guidelines for vaccine deployment, it is essential to have a Pandemic Influenza Preparedness Plan (PIPP) including a section on prioritization of population groups for A/H1N1 vaccination. In the discussion session all countries reported that they have a PIPP but have not identified priority groups for a pandemic influenza vaccination. The participants were aware of the recent recommendations from the Strategic Advisory Group of Experts (SAGE) to WHO. All participants recognized that identifying the priority groups for vaccination would be one of the important steps in developing a vaccine deployment plan.

A consensus emerged that the format for the present workshop may need to be modified to accommodate a session on principles of prioritization for a pandemic influenza vaccine. It was pointed out that the general recommendations on vaccine prioritization have been adequately outlined in the report of the South-East Asia Regional Vaccine Prioritization Workshop held in Bangkok during 11-13 May 2009. These general recommendations for the SEA Region provide a framework, which needs to be adapted by countries to fit the unique situation with the H1N1 vaccine(s).

The subsequent sessions of the workshop followed the sequence of the “Guidelines for the deployment of a pandemic influenza vaccine” published by the Departments of Vaccines and Biologicals and Epidemic, Alert and Response, World Health Organization, Geneva, Switzerland.

The deliberations for the sessions followed the pattern below:

- (1) Plenary: A general introduction to the session
- (2) All participants took a structured pre-test questionnaire at the beginning for all the chapters.
- (3) Plenary: One of the facilitators presented the contents of the chapter. The participants then read the chapter which was followed by an interactive discussion session.
- (4) Group work: Facilitators interacted with country participants using the checklist for the respective chapters as the starting point for laying down the framework for developing a country-specific vaccine deployment plan. The groups consisted of:

Group A: India and Indonesia

Group B: Bangladesh, Nepal and Thailand

Group C: Bhutan, DPR Korea, Maldives, Myanmar, and Sri Lanka

- (5) Recommendations made during these discussions by participants were recorded for each session.
- (6) Participants took the post-test questionnaire for the respective chapters.

A brief description of the sessions and follow up actions agreed by the participants for each area covered in the session are given below:

Session 2: Introduction to guidelines

During this session, Chapter 1 of the guidelines was discussed. This chapter describes the general guidelines for deploying a pandemic influenza vaccine.

The guidelines are:

- Provide a framework for developing detailed procedures to deploy a pandemic influenza vaccine and other ancillary products within seven days of reaching the vaccines for the country
- Assure that each country participant understands the critical need to identify “gaps” in order to develop an adequate deployment plan and invest the resources necessary to establish the “surge capacity” that will be required to deploy vaccine and ancillary items.
- Encourage each country to exercise (test-run) the activities outlined in the deployment plan to confirm the plan’s effectiveness and to identify areas for improvement.
- Assure that each country understands that, to achieve the objectives of its deployment plan, it is essential to manage the processes and structures – including effective decision making related to core logistic activities, human resources, security, information and communications, warehousing, packaging and transportation.

Participants extensively discussed about the necessity of the seven-day time frame for deployment. All agreed about the necessity of fast deployment, and it was later clarified that the seven-day time frame applies to delivery to the final distribution point from the day of receipt to the country and does not apply to completion of actual immunization activities. However, all attempts should be made to vaccinate the targeted groups within a short time to ensure early protection to the disease.

Session 3: Managing deployment efforts

Chapter 2 of the guidelines was discussed. The command and control structure of an Incident Command System (ICS) was discussed, especially the functions of the Incident Commander (IC) and the Chief of Logistics (CoL). The importance of pre-event planning was highlighted.

Member States pointed out that most national plans have not addressed the issue of pandemic influenza vaccine deployment and there is

lack of clear guidelines for prioritization. They suggested that high-level advocacy for developing such a contingency plan should be undertaken.

A pre-planned incident command system should be developed and international support should be available. Although there are persons who function as Chief of Logistics (CoL) within country programmes, they do not function as in an Incident Command System.

The influenza vaccine deployment activity cannot be dealt by the health sector alone. The involvement of all relevant stakeholders is essential. It was observed that ministries of health and other ministries should be involved in identifying surge capacities and in responding to the pandemic. Governments committing resource allocation in advance for vaccine deployment could be a challenge.

Follow-up actions

- (1) All Member States in the Region need to
 - Incorporate a comprehensive Pandemic Influenza Vaccine Deployment Plan (PIVDP) in the PIPP.
 - Identify priority groups for vaccination
- (2) Member States need to identify from the national health system
 - An Incident Commander who will be responsible, overall for vaccine deployment.
 - A Chief of Logistics to plan the delivery of vaccines and other ancillary supplies.
- (3) Member States need to secure high-level political commitment to prepare a PIVDP.
- (4) The country-specific PIVD plans need strategies to mobilize relevant stakeholders to ensure that they commit to achieve successful implementation of influenza vaccine deployment.

Session 4: Legal and regulatory planning issues

Chapter 3 of the guidelines was discussed. Pandemic influenza vaccine will be available in the near future. WHO would get around 150 million doses

of vaccine to be distributed among Member States. The national regulatory authorities (NRA) will have to clear the vaccines before they can be used in the country. If WHO or the manufacturer or donors donate vaccines, recipient Member States may have to waive off liability clauses against the manufacturer and the donors.

Programme managers need to be aware of the regulatory issues and they should do the following:

- Map out current official procedures regarding NRA;
- Make advance contact with concerned offices;
- Obtain national and sub-national level customs and tax clearances in advance;
- CoL should seek legal counsel regarding use of a new vaccine; and
- CoL should check out regulations relating to medical waste.

In the SEA Region, some countries (India, Indonesia and Thailand) may well have indigenous vaccine manufacturers and there are important regulatory issues for countries and national governments. The legal and regulatory issues have to be discussed and resolved well before the vaccines are actually supplied to the country.

Follow-up action

- (1) Member States need to explore legal and regulatory requirements to licence the new pandemic influenza vaccine prior to it being received in the country.

Session 5: Information and communication management

Chapter 4 dealt with reviewing the information system and recommend updates for effective decision making during deployment and establishing and/or upgrading communications hardware. Management of information with regard to all aspects of deployment of a PI vaccine is an essential ingredient for successful implementation of a PIVDP. However, capacities vary at different levels.

It was observed that countries have different systems of inventory management and existing systems for vaccine inventory management (usually for EPI programme) will have to be adapted to suit the needs of pandemic influenza vaccine deployment.

For communicating with the public, the importance of issues of equity underlying the prioritization of risk groups, risk of adverse events following vaccination and other issues were discussed. Proper communication packages need to be built around these issues.

All Member States emphasized the need for developing inventory systems that can track vaccine shipment and delivery information in real time.

Follow-up actions

- (1) An evaluation (gap analysis) of the current capacity of the communication infrastructure, technology and Inventory Management Systems (IMS), and Management Information Systems (MIS) should be carried out and deficiencies rectified.
- (2) Communication plans should address the concerns of the people who will not be initially prioritized for vaccination.

Session 6: Human resource and security

Chapter 5 highlighted the need to define personnel requirements in terms of numbers and skill sets, identify, and train such personnel and facilitate their work with provision of job aids. Protecting health personnel and their families in the pandemic influenza situation is also recognized as a priority.

Categories and numbers of health workers involved in vaccine deployment will depend on the number of shipments and the quantities of vaccine and ancillary items dispatched to each distribution point, the delivery routes and type of transport used.

Training staff members is an important activity to maintain overall quality. The management team must outline responsibilities of each staff member, identify gaps in skills and training, use job aids and other methods to train staff and supervisors and conduct exercises periodically.

The priority issues in the Member States: are shortage of personnel; planning and budgeting for executing training including the design and printing of materials for supporting H1N1 vaccine deployment; translating the training materials; limited time before training, developing job aids including checklists; and coordinating with appropriate government officials to provide security for personnel and vaccines.

Some countries find that the existence of conflict areas with high security risks might be an impediment to successful implementation of a PIVDP.

Follow-up actions

All Member States should:

- (1) Mobilize adequate human resources for vaccine deployment;
 - Mobilize and train suitable human resources for vaccine deployment;
 - Develop job aids for selected human resources;
 - Follow the chain of command; share lessons learnt from experience of the military and sectors handling other emergencies;
 - Identify and designate logistic teams with a team leader at all levels; and
 - Delegate authority and responsibility clearly to the managers managing PIVDP activities.
- (2) Conduct a risk analysis with security experts to plan activities aimed at providing security for vaccine deployment staff and the logistics.

Session 7: Supply chain logistic processes

Participants discussed Chapter 6 of the guidelines. The key areas in supply chain management include receiving the vaccine, managing inventories, packing and bundling vaccine and injection equipment and transporting them to service delivery points.

The goal is to move the vaccine and ancillaries within seven days from their point of receipt in a country to locations throughout the country where healthcare providers administer them. It is important that CoLs identify the gaps in surge capacity and develop a plan with the costs.

According to some participants, some Member States are unable to meet the time line of seven days due to inadequate resources. These inadequate resources include insufficient storage capacity for vaccines, ancillary and other items, as well as lack of adequate staff and transport facilities at all levels.

Inaccurate estimates of priority groups for the vaccination may cause a situation of insufficient logistic supplies. Geographically inaccessible areas in some countries may affect the deployment within seven days

Follow-up actions

- (1) Conducting a gap analysis using a checklist will help determine the essential human, financial and other resources required for implementing activities related to logistics. Careful micro-planning will be helpful to accomplish deployment of vaccines within seven days of receipt.
- (2) Advance planning for surge capacity for vaccine storage, management of the cold chain, logistics and transport will optimize the use of available resources to rectify the deficiencies detected in the gap analysis.
- (3) Mobilize additional resources from the public and private sectors.
- (4) Identify proxy measures that can be used for near-precise estimates of priority groups.
- (5) Carry out a gap analysis and develop plan for adequate human and other resources to ensure that hard to reach areas can be accessed on time.

Session 8: Introduction to logistic planning tool

This was an interactive plenary session where an EXCEL-based logistic planning tool was introduced to the participants. The tool could be used to plan various aspects of logistics supply such as:

- Amount of vaccines and injection supplies at all distribution points
- Assess capacities for storage, distribution and waste management
- Assess capacities for administration of vaccine
- Scenario analysis: impact of different immunization strategies.

It can be used for both routine and supplementary vaccinations. Participants observed that the tool is useful and can be adapted to the need of the countries.

Session 9: Waste management and injection safety

During this session Chapter 7 of the guidelines was discussed. The objectives of this session were to ensure that participants are aware of the principles and procedures for:

- Administering the injectable pandemic vaccines in a way that poses
 - No harm to the recipient
 - No harm to the health care worker
 - No harm to the community.
- Planning for surge capacity and for safe collection, transport and disposal of health care waste generated by pandemic vaccination.

It was emphasized that national regulations regarding biological waste management must be respected at all times. It was recognized that there are varied waste management practices at different levels of health care delivery services

Follow-up action

- (1) Require to identify resource needs and standardize the clinical waste management procedures at all levels for excess clinical waste generated during pandemic immunization response.

Session 10: Termination of deployment

The guidelines in Chapter 8 were discussed. For the termination of deployment, the Incident Commander must ensure that the country has accomplished the following:

- Return of stocks is endorsed in the inventory management system.
- Confirm the completion of all deployment actions including the safe disposal of all medical waste.
- Document the results to learn from the experience gained during vaccine deployment.

On termination of deployment, the IC and CoL must:

- Send personnel back to their original duty stations.
- Return resources to the ministries and/or agencies that provided them.
- Recall excess stocks of vaccine, ancillaries, and supplies.
- Confirm safe storage of stocks.

Follow-up actions

- (1) Include a provision for documentation and budgetary allocation in the vaccine deployment plan.
- (2) Encourage the supervisors to maintain a log book during vaccine deployment.

4. Closing session

Dr Myint Htwe, Director, Programme Management attended the closing session. Participants agreed to discuss the follow-up actions with the relevant officials in the Member States. Participants observed that all countries have adequate experience in conducting mass vaccinations with polio, measles, TT and Japanese encephalitis vaccines. It is necessary to develop micro-plans based on the priority groups and vaccines available to ensure vaccination of target groups once the vaccines are deployed to the sub-distinct levels.

Annex 1

List of participants

Member Countries

Bangladesh

Dr AKF Muzibur Rahman
Programme Manager
Child Health and Limited Curative Care
Director-General, Health Services
Ministry of Health and Family Welfare
People's Republic of Bangladesh
Dhaka
Email: akfmuziburrahman@yahoo.com

Dr ASM Alamgir
Medical Officer (Virologist)
IEDCR
Ministry of Health and Family Welfare
People's Republic of Bangladesh
Dhaka
Email: aalamgir@gmail.com

Bhutan

Dr Dhruptob Sonam
Medical Superintendent
Paro Hospital
Ministry of Health
Royal Government of Bhutan
Paro, Thimphu
Email: dsonam@druknet.bt

Mr Tshewang Dorji Tamang
Program Officer
Vaccine Preventable Disease Program
Department of Public Health
Ministry of Health
Royal Government of Bhutan
Thimphu
Email: t_tamanghealth.gov.bt

DPR Korea

Mr Pak Kyong Chol
First Secretary
Embassy of the Democratic People's Republic
of Korea
E-455, Greater Kailash, Part II
New Delhi 110048

India

Dr N.S. Dharmshaktu
Deputy Director General
Directorate General Health Services
Ministry of Health & Family Welfare
Nirman Bhawan
New Delhi
Email: nsdharmshaktu@yahoo.com

Indonesia

Dr Reams Vensya Sihotang
Sub Directorate of Surveillance Epidemiology
Directorate of Disease Control & Environmental
Health
Ministry of Health
J I Percetakan Negara No 29
Jakarta
Email: vensya13@hotmail.com

Dr Prima Yosephine
Sub Directorate of Immunization
Directorate of Disease Control & Environmental
Health
Ministry of Health
J I Percetakan Negara No 29
Jakarta
Email: primayosephine@yahoo.com

Maldives

Dr Moosa Hussain
Medical Officer
Ministry of Health and Family Welfare
Male
Email: hmoosa@hotmail.com

Dr Abdulla Ariz
Assistant Construction Officer
Ministry of Health and Family Welfare
Male
Email: ariz@health.gov.uv

Nepal

Dr Fakir Chand Ghami
Child Specialist
Kathmandu
Email: fakirgami@hotmail.com

Mr Om Prasad Upadhyay
Immunization Supervisor Officer
District Public Health Office
Nepalgunj, Kathmandu
Email: omprasad.upadhaya@yahoo.com

Sri Lanka

Dr Paba Palihawadana
Chief Epidemiologist
Epidemiology Unit
Ministry of Healthcare and Nutrition
Government of the Democratic Socialist
Republic of Sri Lanka
Colombo
Email: paba@health.gov.lk

Thailand

Dr Thitipong Yingyong
Medical Officer
Bureau of Epidemiology
Department of Disease Control
Ministry of Public Health
Tivanond Road
Nothanburi 110000
Email: thity_24@yahoo.com

Mr Somsak Puengsaitdee
Pharmacist
Bureau of General Communicable Diseases
Department of Disease Control
Ministry of Public Health
Tivanond Road
Nothanburi 110000
Email: somsakzp@yahoo.com
somsakzp@gamil.com

Temporary Advisors

Dr Subodh Chandra Banik
Logistic Officer-EPI
EPI Bhaban
Mohakhali
Dhaka
Bangladesh
Email: utsuk@rediffmail.com

Dr Utsuk Dutta
Head, Dept. of Edu & Trng
National Institute of Health & Family Welfare
Munirka
New Delhi 110067
India
Email: utsuk@rediffmail.com

Dr Sulistya Widada
Cold Chain and Logistic Officer
Immunization Sub-Division
Ministry of Health
Republic of Indonesia
Jakarta
Indonesia
Email: widadasulistya@yahoo.co.id

Dr Ranjan Wijesinghe
Consultant (Epidemiologist)
Epidemiological Unit
Ministry of Healthcare and Nutrition
Government of Democratic Republic of
Colombo
Sri Lanka

WHO/HQ

Mr Peter Carrasco
Policy Adviser – Vaccine Security
Department of Injections, Vaccines and
Biologicals
Email: carrascop@who.int

Mr Richard Nolan
IVB Consultant

Mr Henry Tuell
IVB Consultant
Email: insredlodge@earthlink.net

Country Staff

Dr Selina Ahmed
National Programme Officer (EPI)
WHO Bangladesh
Bangladesh

Dr Hamid Jafari
Project Manager
National Polio Surveillance Project
New Delhi, India

Dr Stephen Sosler
Technical Officer
Routine Immunization and Measles Control
National Polio Surveillance Project
New Delhi, India

Dr Dipankar Mukherjee
Regional Team Leader (Eastern Region)
National Polio Surveillance Project
Calcutta, West Bengal, India

Dr Chandrakant Lahariya
New Vaccine Focal Person
National Polio Surveillance Project
New Delhi, India

Dr Renu Paruthi
Training Focal Person
National Polio Surveillance Project
New Delhi, India

Dr Bardan Jung Rana
MO-EPI
Indonesia

Dr Nihal Singh
TIP-EPI
Myanmar

Dr William Schluter
MO-EPI
Nepal

WHO-Secretariat

Dr Myint Htwe
Director, Programme Management

Dr Dini Latief
Director, FHR

Dr Jai P. Narain
Director, CDS

Dr Arun Thapa
Coordinator, IVD

Dr Jayantha B.L. Liyanage
Medical Officer – EPI, IVD

Dr Nalini Ramamurty
Virologist, IVD

Dr Nihal Abeysinghe
TIP - New Vaccines Introduction, IVD

Dr Anindya Bose
TIP-EPI, IVD

Dr Madhu Prasad Ghimre
Medical Officer, DSE

Dr Jo Un Chol
JPP, DSE

Mr B.L. Bhatia
Secretary, IVD

Ms Chitra Salil
Secretary, IVD

Ms Souma Mathew
Clerk, IVD

Annex 2

Programme

Monday, 14 September 2009

0830-0900 Registration

1. Opening Ceremony

0900-0915 Opening remarks

*Dr Myint Htwe
Director Programme
Management, WHO/SEARO*

0915-0930 Self-introduction: All participants

Arun Thapa, IVD/SEARO

0930-0935 Administrative Announcements

IVD/SEARO

2. Introductory session

0935-0945 Objectives of the Workshop

Arun Thapa, IVD/SEARO

0945-1015 Update: Current H1N1 Global Situation

Peter Carrasco, WHO/HQ

1015-1045 COFFEE BREAK

1045-1115 Update: Current H1N1 SEARO Situation

Madhu Ghimre, CSR/SEARO

1115-1130 Pandemic Influenza: WHO Vaccine Deployment Strategy

Peter Carrasco, WHO/HQ

1130-1200 Discussion

All Participants

3. Introduction of the training Course – Chapter 1

Plenary:

1300 Introduction of training course

Peter Carrasco, WHO/HQ

1315 Pretest All Chapters

1345 Reading Chapter 1

Instructor Presentation

Peter Carrasco

Discussion

4. Managing deployment efforts - Chapter 2

1430 Reading - Chapter 2

Peter Carrasco, WHO/HQ

Instructor Presentation

Peter Carrasco

Discussion

Group work:

1510 Checklist review and discussion

Post Test - Chapter 2

Identification of major challenges and solutions

Plenary:

1615-1630	Presentation by Group of Major Challenges and Solutions – Chapter 2	
1630	5. Legal and regulatory issue for deploying vaccine – Chapter 3	
	Reading - Chapter 3	<i>Peter Carrasco, WHO/HQ</i>
	Instructor Presentation	
	Discussion	
1730	Adjournment	
1730-1830	Facilitators meeting	All trainers

Tuesday, 15 September, 2009

6. Information and communication management - Chapter 4

Plenary:

0900	Reading - Chapter 4	<i>Richard Nolan, WHO/HQ</i>
	Presentation Instructor	
	Discussion	

Group work:

0945	Checklist review and discussion	
	Post Test - Chapter 4	
	Group work of major challenges and solutions – Chapter 4	
	Challenges & Solutions	

Plenary:

1100-1130	Presentations by Group Work of Major Challenges and Solutions - Chapter 4	
-----------	---	--

7. Human Resources and Security for Deploying Vaccines – Chapter 5

Plenary:

11:30	Reading - Chapter 5	
1150	Instructor talk	<i>Richard Nolan</i>
	Discussion	

Group work:

1330	Checklist review and discussion	
	Post test – Chapter 5	
	Group Work of Major Challenges and Solutions - Chapter 5	

Plenary:

1430 Presentations by Group Work of Major Challenges and Solutions - Chapter 5

8. Supply Chain Logistics Process for Deploying a Vaccine - Chapter 6

1500 Reading - Chapter 6 *Henry O. Tuell, WHO/HQ*
Instructor Presentation
Discussion

Group work:

1615 Checklist review and discussion
Post test – Chapter 6
Group Work of Major Challenges and Solutions - Chapter 6

Plenary:

1715 Presentations by Group Work of Major Challenges and Solutions - Chapter 6
1745-1830 Facilitators Meeting *All trainers*

Wednesday, 16 September 2009

9. Volume Calculator and Stock Management

Plenary:

0900 Simulation excel tool – Volume Calculator *Dr Henry Tuell, WHO/HQ*
1045 Continuation – Simulation excel tool – Volume calculator
1300 Vaccine Stock management *Dick Nolan, WHO/HQ*
1400 Vaccine loss reduction *Dick Nolan, WHO/HQ*
1515 Discussion
1545 **10. Sharps and Biological Waste Management - Chapter 7**
Reading Chapter 7
Instructor Presentation *Peter Carrasco, WHO/HQ*
Discussion
1700-1800 Facilitators Meeting *All trainers*

Thursday, 17 September 2009

Continuation Group Work - Chapter 7 - Waste Management

Group work :

0900 Checklist review and discussion
Post test
Group Work of Major challenges and solutions - Chapter 7

Plenary:

1000 Presentations by Group Work of Major Challenges and Solutions - Chapter 7

1045 **11. Injection Safety – Pandemic H1N1 Mass Vaccination Campaign**

Ensuring Injection Safety during Mass Campaign *Peter Carrasco, WHO/HQ*

Monitoring Injection Safety

Discussion

12. AEFI Surveillance – in Pandemic Vaccination Campaign

1130 AEFI Surveillance *Peter Carrasco, WHO/HQ*

Monitoring GBS

Discussion

1315 **13. Termination of deployment operations - Chapter 8**

Plenary:

Reading - Chapter 8 *Henry O. Tuell WHO/HQ*

Instructor Presentation

Discussion

Group work:

1345 Checklist review and discussion

Post -test

Group Work - Planning for Preparation of a Deployment Termination Report

Plenary:

1430 Presentation by Group Work – Planning Issues for Preparing Deployment Termination Report

1445 Sample Template for Preparing a Deployment Plan *Peter Carrasco, WHO/HQ*

Group work:

1600 Group Work - Preparing a Deployment Plan

Plenary:

Presentation Group Work: Summary of Major Challenges and Solutions

Friday, 18 September 2009

14. Mock Vaccine Deployment Plan

Plenary :

0830-1000 Group Work - Table top exercise

1030-1300 Continuation - Group Work - Table top exercise

1400-1530 Presentation of Group Work

1530-1545 Closing Remarks

1545-1615 Facilitators Meeting *All trainers*

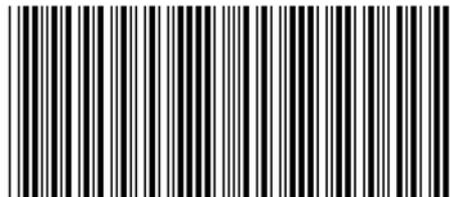
The severity of the pandemic H1N1 is currently considered to be moderate, with most patients experiencing uncomplicated, self-limited illness. Nevertheless, some groups appear to be at increased risk for severe disease and death. Vaccination would be important for protecting the integrity of the health-care system and the country's critical infrastructure; reducing morbidity and mortality; and reducing transmission of the pandemic virus within communities. The Regional Workshop on Planning for the Deployment of Pandemic Influenza Vaccine was conducted from 14-18 September in New Delhi, India. This report summarizes the important considerations in deployment of pandemic influenza vaccine, including management of deployment efforts, addressing legal and regulatory requirements, injection safety, information and communications, logistics management and waste management and follow up action for Member-States of the South-East Asia Region.



**World Health
Organization**

Regional Office for South-East Asia

World Health House
Indraprastha Estate,
Mahatma Gandhi Marg,
New Delhi-110002, India



SEA-Immun-58