

---

# H1N1 Pandemic Influenza Vaccine Deployment in the African Region

---

Debriefing Meeting  
27 October 2010  
Brazzaville, Congo

**IVD/ARDO/AFRO**



## **WORLD HEALTH ORGANIZATION Regional Office for Africa**

### **Pandemic Influenza A (H1N1) Vaccine Deployment Activity Debriefing Meeting, 27 October, 2010**

#### **EXECUTIVE SUMMARY**

The Regional Office for Africa, in its preparedness and response effort to address Pandemic Influenza A (H1N1), gave due priority to vaccine donation initiative where IVD/ARDO was mandated to take the lead to coordinate and facilitate vaccine deployment and implementation activity.

In November 2009, a two-part workshop, each in French and English, was conducted to enable eligible countries to develop national vaccine deployment plans (NDP) as per the new WHO guideline designed to cater Pandemic (H1N1).

In its diligent move, IVD garnered the partnership of USAID to acquire teams of public health and logistics experts<sup>1</sup> who were seconded to provide technical support to implementing countries from within existing WHO system at Regional (RO) and Sub-regional (IST) levels. The H1N1 technical teams catalyzed activities in planning, training, logistical support, and overall supervision of implementation activities.

In spite of the wide range of challenges, countries in the African Region have executed the H1N1 vaccine deployment activities very well. The results clearly reflect the synchronized effort by governments and partners to meet the stated objectives and reach the goal of the vaccine donation initiative. The AFRO-USAID partnership envisaged a year earlier was a factor in the whole undertaking.

With the world now in the post-pandemic period<sup>2</sup> and much of vaccine deployment activity in the African Region reached its final and conclusive stage, IVD/ARDO organized a one-day debriefing meeting to review the overall vaccine deployment activities in the Region and discuss the key lessons learnt towards a better Regional preparedness and response in the future.

The meeting was attended by vaccine deployment teams from WHO-HQ, the Regional Office and ISTs, colleagues from WHO EPR and ISD programmes, including representatives from USAID (MCHIP/DELIVER).

Going through the plenary presentations and discussions covering all issues of H1N1 pandemic then and now, participants made recommendations towards dealing future pandemics and emergencies faster and better..

---

<sup>1</sup> USAID (MCHIP/DELIVER) seconded 8 consultants (4 public health experts and 4 logisticians) based at RO and three ISTs from Nov. 2009 to end of October 2010..

<sup>2</sup> DG statement [www.who.int/entity/mediacentre/news/statements/2010/h1n1\\_vpc\\_20100810/en/index.html](http://www.who.int/entity/mediacentre/news/statements/2010/h1n1_vpc_20100810/en/index.html)

## **RECOMMENDATIONS**

### **1. General**

- a) The achievements and experience in the H1N1 vaccine deployment activity have to be documented and be shared with all stakeholders.
- b) The overall achievements are attributable to commitment and a harmonious collaboration between governments, WHO and partners. This collaboration needs to be enhanced further by including more partners and even more units within WHO and other participating organizations.

### **2. Unfinished vaccine deployment activity**

In conjunction to what has been achieved, there are still some countries which have not completed implementation and which did not submit termination reports. IVD focal persons both at IST and WCO levels should continue to support and monitor activities to ensure completion of deployment activities.

### **3. Vaccines deliveries, registration and waiver**

- a) Whenever possible, it is strongly recommended to supply countries with vaccines of longer shelf life. Once countries are notified on details of vaccine products (types), quantity, and delivery dates, any change on such details need to be minimized or, avoided altogether.
- b) An effort is needed to encourage countries to develop a robust product registration system with shorter dossier than seeking a waiver which in many cases was a barrier causing significant delays.
- c) There is a need to explore the possibility of establishing a storage facility at regional and IST levels, which could be of strategic importance for swift distribution to countries.
- d) At times of pandemics and other emergencies that require moving large volume of vaccines, plans to train global logistics should be part of the strategy and initial approach.
- e) Countries need directives on what to do with the remaining vaccines which in part are already expired.

### **4. Injection Waste Management**

The problem regarding injection waste management was consistently reported from all ISTs, implying the scope of the problem. There is an urgent need to deal with the problem not only for pandemics and emergencies, but more importantly for the routine immunization and SIAs. IVD should take the lead to initiate a collaborative effort to addressing this important but seemingly neglected activity.

### **5. Partnership**

- a) The AFRO-USAID partnership on H1N1 vaccine deployment was well aligned, productive and instrumental for what has been achieved. This model has to be strengthened to explore the scope and depth in more areas of collaboration. The following are few examples where a collaborative approach is recommended:
  - i. Disease and post marketing surveillance
  - ii. Laboratory and diagnostic capacity building
  - iii. Injection waste management
  - iv. Technical support

- b) More work is needed to bring more partners and traditional associates such as UNICEF onboard and review the agenda of collaboration.

## **6. Research**

- a) More research on H1N1 virus, search for vaccines, on clinical and overall epidemiology of the diseases needs to be encouraged.
- b) Studies are needed to identify factors related to high performance of countries such as Togo and Zimbabwe in relation to others which did not well.

## **7. Training**

In the event WHO-HQ is to conduct training activities and workshops for Regional Offices, it is recommended that HQ build its capacity ( such as TOTs) first before embarking to train WHO Regions with a small team in a long period of time. The H1N1 training workshop for AFRO was possible 6-months after training begun in other Regions.

## **8. Accountability**

Donors and partners require feedback other than mere acknowledgement of the harmonious cooperation and generosity. Countries should be encouraged to provide the final termination report including reports on how resources were used and on how the country benefited from the collaboration and donation.

## **9. Health Promotion, Communication and Social mobilization**

In the event of future pandemic or other emergency preparedness and response effort, health promotion activities and social mobilization deserve due attention and utilization. More effort is needed to strengthen these areas.

## A. INTRODUCTION

The emergence of the new Influenza A (H1N1) virus and the declaration on 11 June, 2009 of raising the pandemic alert to Phase 6<sup>3</sup>, demanded heightening of the preparedness and response effort to limit the spread of the virus. Among the many applicable strategies, vaccination was the most cost effective approach that countries quickly adapted.

Recognizing the incongruity of nations in terms of capacity and resources, the WHO Director General called upon high-income governments and vaccine manufacturer industry to come together in support of an initiative by which middle to low-income countries will have access to vaccines. As the result, wealthy nations and vaccine manufactures pledged for vaccines, financial and technical support. Forging alliances with partners, particularly with USAID, the WHO DGs office took the lead to coordinate the vaccine donation and deployment initiative. The initiative identified 97 countries including 44<sup>4</sup> from WHO African Region as beneficiaries.

Along many other preparedness and response efforts undertaken, the Regional Office for Africa prioritized H1N1 vaccine donation initiative where IVD/ARDO was mandated to take leadership responsibility to coordinate and facilitate the implementation activity.

In November 2009, a two-part Regional workshop, each in French/Portuguese and English, was conducted to enabling eligible countries to revise previously laid preparedness and response plans and develop national vaccine deployment plans (NDP) as per the new WHO guideline designed for pandemic influenza A (H1N1) 2009.

In its diligent move, IVD garnered the partnership of USAID to acquire teams of public health and logistics experts<sup>5</sup> who, within existing systems at Regional (RO) and sub-regional (IST) levels, provide technical guidance and support to implementing countries. The technical team's supportive role started at the training workshop to countries and sub-regions they were to support.

The H1N1 vaccine deployment teams have all been instrumental to catalyze activities in planning, training, logistical support, implementation and overall supervision of implementation activities. The WHO African Region has registered a remarkable achievement in regard to the broader goal of vaccine donation initiative and can be explained partly by the AFRO-USAID partnership envisaged a year earlier.

With the world now in the post-pandemic period<sup>6</sup> and much of vaccine deployment activity in the African Region reached its final and conclusive stage, IVD/ARDO organized a one-day debriefing meeting with the following objectives and expected outcome:

<sup>3</sup> [http://www.who.int/mediacentre/news/statements/2009/h1n1\\_pandemic\\_phase6\\_20090611/en/html.index](http://www.who.int/mediacentre/news/statements/2009/h1n1_pandemic_phase6_20090611/en/html.index)

<sup>4</sup> All but Algeria and South Africa are eligible for the WHO H1N1 vaccine donation initiative

<sup>5</sup> USAID (MCHIP/DELIVER) seconded 8 consultants (4public health experts and 4 logisticians) based at RO and three ISTs from Nov. 2009 to end of October 2010..

<sup>6</sup> DG statement [www.who.int/entity/mediacentre/news/statements/2010/h1n1\\_vpc\\_20100810/en/index.html](http://www.who.int/entity/mediacentre/news/statements/2010/h1n1_vpc_20100810/en/index.html)

## **B. OBJECTIVES AND EXPECTED OUTCOME OF THE MEETING**

### ***General Objectives***

The meeting was held for stakeholders and experts to review the overall vaccine deployment activities in the Region and discuss the key lessons learnt towards a better Regional preparedness and response in the future.

### ***The specific objectives of the de-briefing meeting were:***

1. To present full account of H1N1 vaccine deployment activity and achievements in the African Region
2. To identify and document enabling factors, challenges, and lessons learnt from the Region wide vaccine deployment activities
3. To seize the opportunity to discuss how gained experience and learnt lessons can be used to advance better preparedness in the event of pandemics in the future
4. To assess the successful arrangement and unique model of partnership between AFRO and USAID in prospect of expanding the level and scope of future cooperation.
5. To develop a consolidated Regional Report to be made available for future reference .

### ***Main outcome of the meeting***

1. Participants from WHO and USAID will be briefed on the current situation of H1N1 influenza and the Regional preparedness and response effort made during the past year
2. Participants will learn more on the systematic presentations of achievements, challenges and lessons from the H1N1 vaccine deployment activity in the African Region
3. Participants will discuss on major issues from the plenary presentations to make recommendations for stakeholders' use in the future

## C. OPENING OF THE DEBRIEFING MEETING

The meeting was opened by Dr. Richard Mihigo, the Regional Focal Person of H1N1 Vaccine Deployment, by conveying the message of apology from Dr. Matshidiso Moeti, ARD, and Dr Deo Nshimirimana, IVD PM, who were both unable to attend the meeting due to duty travels. After a brief introductory background on H1N1 vaccine deployment activity, Dr Richard expressed his gratitude and appreciation for all participants who made their way from Geneva, Washington and the three IST capitals – Harare, Libreville and Ouagadougou. The meeting was attended by vaccine deployment teams at WHO-HQ, RO and IST levels and USAID (MCHIP and DELIVER) representatives including all consultants from RO and ISTs. He underlined the importance of the meeting not only for what has already been done but also to what can be done in the future.

Dr. Richard then called upon Dr. Francis Kasolo, Programme Manager of the Integrated Disease Surveillance, to take over the chairmanship replacing Dr ROUNGOU J. Baptise, Director of DPC cluster who unfortunately was caught up in unscheduled but more urgent task.

Dr. Kasolo, gracefully accepting the chairmanship, gave a welcoming address followed by introduction of the programme of the meeting. He asked participants for any amendment or comment but was unanimously endorsed with only one suggestion. The suggestion was to use the time allocated for presentation from USAID for discussion as Robert Blanchard was unable to attend nor the participants from MCHIP and DELIVER were not in a position to represent him.

The main agenda of the day and plenary presentations were broadly reflecting the following:

1. The epidemiologic situation of pandemic influenza A (H1N1) 2009 in the African Region and the preparedness and response effort that were in place
2. The global perspective of H1N1 vaccine deployment activities and the implementation of the WHO-DG's vaccine donation initiative
3. H1N1 vaccine deployment activities in the African Region: achievements, challenges and lessons learnt and,
4. General discussions and recommendations

## D. PLENARY PRESENTATIONS

1. *"Preparedness and response to Pandemic A (H1N1) 2009 in WHO African Region" from EPR and IDS Programmes in DPC cluster of AFRO.*

The EPR/IDS joint presentation aimed at providing an overview on the epidemiologic characteristics of pandemic Influenza A (H1N1) in the African Region and the various steps taken in preparation to respond to the pandemic.

- a. Following reports received by WHO on sustained person to person transmission of a new influenza virus during April 12-23, 2009, the Regional Office moved faster to take early steps in preparation to respond to this new

threat. The Regional 'Crisis management committee (CMT) was established on 27 April, even before the pandemic alert level was raised to phase 6 and the first laboratory confirmed case was reported on 11 and 18 June, 2009 respectively. ISTs and countries stepped up the effort and established/reactivated National CMTs and revised Regional Integrated Pandemic preparedness and Response plans to accommodate H1N1. The Regional conference on H1N1 held in South Africa, in August, 2009 was also part of this effort.

- b. The Regional Office support to countries included distribution of tools and guidelines to enhancing national surveillance systems to enable the system to report cases of H1N1 including zero reporting. Pandemic monitoring was launched using a software tool known as 'Event management System (EMS)' which is still on use in 37 countries.
- c. As of October 2010, a total of 18,730 cases and 168 deaths were reported from 37 countries. Most affected populations were those between 5-45 years of age with a relatively higher hospitalization and fatality rate among young adults. While epidemiologic and serologic data suggested that older adults are less susceptible, pregnant women, people with chronic illnesses, immunocompromised and people with underlying health conditions, and young children were identified as groups most at risk.
- d. Along with the surveillance enhancement, the influenza laboratory capacity was strengthened by mapping the network for fast sample referrals. Effort was made to strengthen 19 of the 25 influenza lab facilities by providing with real-time PCR and other essential materials for all member countries.
- e. Antiviral courses and personal protection equipment (PPE) were distributed to member countries with additional supplies prepositioned at country, ISTs and Regional levels.
- f. Construction of a modern strategic health operations centre (SHOC room) was also a related development that is viewed to greatly improve the management of health crisis and pandemics in the region.
- g. Public health messages, and guidelines on clinical management, infection control and surveillance were also developed and distributed along with a seed fund to assist in short term plans.

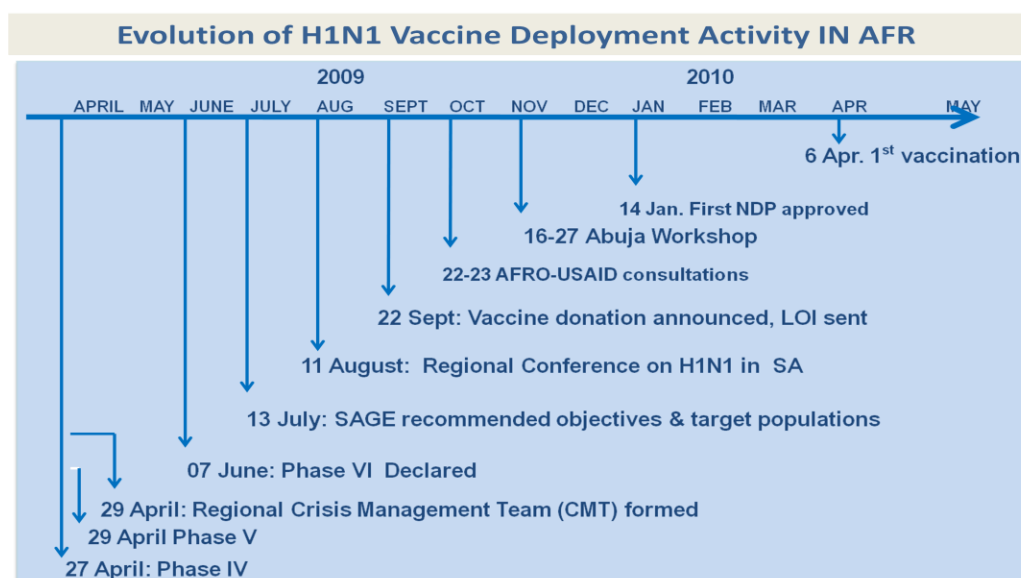
## 2. **" H1N1 Vaccine Deployment Activity in the African Region" from IVD Programme in ARD cluster of AFRO.**

The IVD presentation gave a comprehensive picture of H1N1 vaccine deployment activity in the African region covering the period of November 2009 to October 2010. The presentation was concluded by highlighting major challenges and lessons that were learnt during this period.

### *a. Chronology and evolution of vaccine deployment activity in AFR*

- i. Although H1N1 vaccine deployment activity was officially initiated in September 2009 when WHO-DGs office sent invitation for LOI to eligible countries, it did not take shape until IVD held a consultative meeting with USAID in October and conducted a training workshop in November 2009.



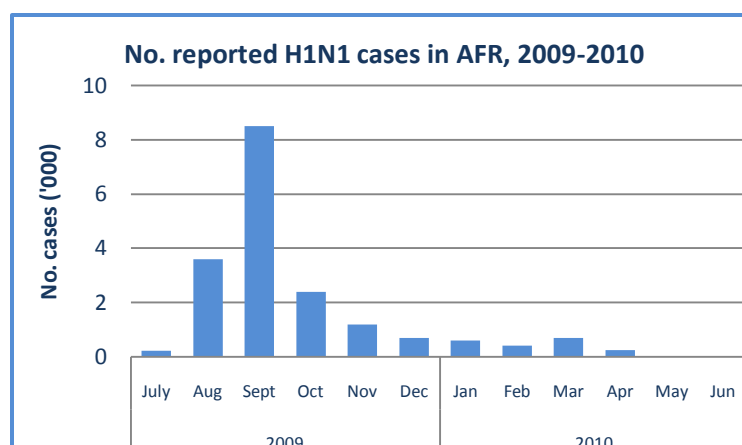


*b. Abuja Training workshop*

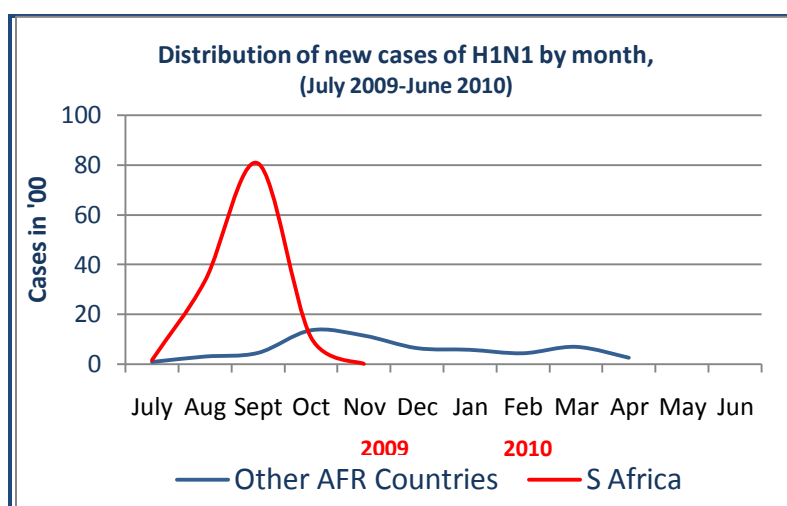
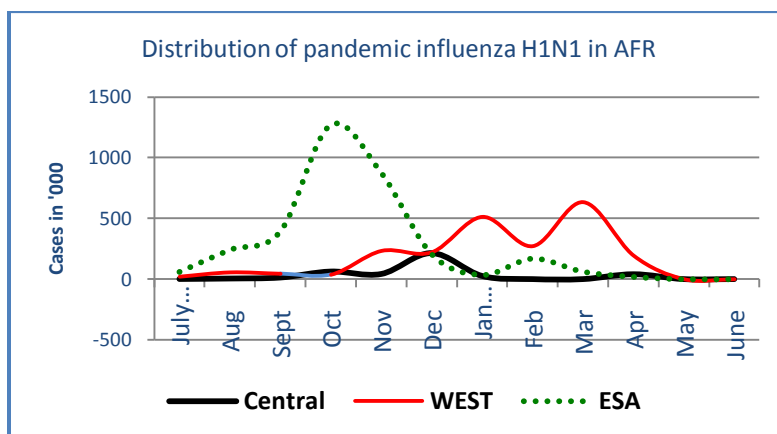
- i. While AFRO-USAID consultative meeting in October bolstered IVD's technical capacity, it was the workshop with the platform for 160 representatives of MoH and WCO from 45 countries that begun the planning process. By the end of the workshop, every participant country had a draft plan that nearly meet requirements for approval.
- ii. The workshop was conducted in both French and English and was facilitated by experts from WHO HQ, RO, ISTs and USAID consultants.

*c. Epidemiological background for vaccine deployment activity in AFR.*

- i. The pandemic influenza A (H1N1) 2009 was reported to have reached 35 countries (sparing only 11) with a total of 18,598 cases during June 2009 and May 2010. More than 90% of the cases occurred in 29 (84%) of the countries between June-December 2009, with only 10% of all cases reported from 6 countries in 2010.



- ii. It was also shown that South Africa alone reported nearly 70% of all cases reaching its peak in September, 2009 and no case since December 2009.
- iii. The pandemic was very active in IST ESA in 2009 but with a very significant drop in reported cases in much of the sub-region in 2010. In contrast, the virus was highly active in IST WEST in 2010 with rising number of cases reported in countries like Senegal, Niger and Chad.



*d. Vaccine deployment plans, vaccines and ancillary supplies, implementation and results;*

Meeting Selection criteria

- i. Of the 44 eligible AFR countries that submitted LOI, 39 (88.6%) entered a signed agreement (LOA) with WHO.
- ii. Of the 39 countries that submitted LOA, 37 (95%) had their national plan (NDP) approved to receive the vaccines and supplies..
- iii. Of the 37 countries that qualified for the donation, 34 (92%) have fully met all the criteria and received vaccines and ancillary supplies.

- iv. Five others (11%) developed an approved national plan (NDP) and secured funding, but failed to finalize the implementation. Six countries (13%) including DR Congo, as group two priority country, did not go far beyond submitting LOI.
- v. Pandemic situation, demands fast deployment of vaccines in short duration of time. As measured by different parameters, deployment activity in the Region took invariably much longer than anticipated.

#### Vaccine Deployment Plan

- a) Of the key criteria and indicators of deployment activities, LOI and LOA are completed by Ministry of Health (MoH) in each country, often with little follow up calls or no assistance. The part that required technical assistance from WHO or other partners was the development of Vaccine Deployment Plan (NDP).
- b) There was a progressive effort during Abuja workshop (Nov. 2009), to help participants compile a draft NDP which only needed polishing and official endorsement by MoH of the respective countries.
- c) The first two NDPs from Togo and Kenya, were approved in mid-January 2010, in a 4 weeks delay than originally planned. In realization to the slow process, technical support was intensified and resulted in a dramatic increase to approve deployment plans. As the result, 24(67%) of the plans were approved between March and May 2010. Twenty one country visits and 31 consultant missions were made during this period and a little after that.

#### Time Elapsed on deployment activities and delays

- d) Eligible countries that have met all requirements were found to have spent disproportionately long period of time to reach and finalize deployment activities. The lapse in time was in every step of activities in every country.
- e) Activities such as returning signed LOI or LOA, look straight forward and simple. But signing these documents took on the average as long as 68 and 40 days respectively. More delays and time lapse was also noted between plan approval and vaccine arrival to starting implementation. Countries spent an average of 45 days between the day they receive vaccines and the day they launched the vaccination campaign. The duration between plan approval and implementation took up to ten-weeks (75 days) and in some cases up to 100 days as in IST Central. In general, delays and time lapse has had a significant implication, especially in respect to the desire to deploy vaccines in 'seven days' in pandemic situation.

#### Vaccine arrival and implementation

- f) Originally, vaccine deployment timeframe was set to vaccinate at least 2% of populations in Kenya and Togo by November 2009, and in Nigeria and D R Congo in December 2009. Deployment and implementation covering 10% population in the rest of 39 countries was planned to be completed in the first quarter of 2010. Because of the delays mentioned above, the first vaccination campaign did not

start until 6 months after, in April 2010. Implementation activities accelerated during the months of May and August, 2010.

- g) Thirty four of the 37 countries qualified for donation received vaccines and ancillary supplies by October 2010. The other three had either failed to submit LOA (Mali and Mozambique) or voluntary withdrawn (Burundi).
- h) A total of 32.1 million doses of WHO prequalified H1N1 vaccines from 5 vaccine manufacturers, and matching ancillary supplies (syringes, safety boxes), were delivered to 34 countries. South Africa, received 3.5 million doses of vaccine, but met other supplies from own resources.
- i) The H1N1 vaccine deployment activity in the region raised a total of \$29.1 million USD. The funding by and large was a joint contribution by WHO (67.3%), Governments (26.2%) and USAID (5.7%). Four countries, Algeria, Botswana, Mauritius and South Africa, fully funded the deployment operation, with only technical support..
- j) The cost of ancillary supplies and in-country handling and distribution of vaccines and related supplies was largely covered by USAID

**Fig. Distribution of WHO prequalified H1N1 vaccines in African Region**

N o	Vaccine Brand	Vaccine Manufacturer	Doses (‘000)	%	Countries (number)
1	Fluvarin	Novartis	730.0	2.3	Kenya (1)
2	Focetria	Novartis	256.8	0.8	Zambia (1)
3	Pandemrix	GSK	9,134.5	28.5	Burkina Faso, Ethiopia, Ghana, Guinea, Namibia, Rwanda, Sao Tome, Senegal, Togo (9)
4	Panenza	Sanofi, Fr.	8,074.7	25.2	Botswana, Cameroon, C. African Republic, Congo, Cote d'Ivoire, Guinea-B, Mauritius (7)
5	Parvax	CSL	957.7	3.0	Comoros, EQ Guinea, Gambia, Lesotho, Liberia, Mauritania, Seychelles, Swaziland (8)
6	Sanofi US	Sanofi, US.	12,947.3	40.3	Angola, Madagascar, Malawi, Niger, Nigeria, Sierra Leone, South Africa, Zimbabwe (8)
	Total		32,101.0	100	Total beneficiaries (34)

- h. Following the detailed account of the deployment activities in the Region, the IVD presentation moved to area of the lessons drawn and key challenges.

### **Lessons**

- a) H1N1 vaccine deployment activities in AFR specially the fulfillment by many countries, of the key criteria of LOI, LOA, NDP, and other legal and regulatory adjustments were a clear evidence of political will and commitment. This was even shared by countries which did not complete the activity.
- b) Countries and WHO of all levels have in recent years developed a considerable degree of capacity to preparedness and response to health emergencies. Although functionality may vary from country to country, it is realized that every country has established 'crisis management team' or 'task force' and most countries have had

strategic plan on preparedness and response which in a way was the basis for developing H1N1 vaccine deployment plans.

- c) In all the process of H1N1 vaccine deployment activity, the existing health/EPI system and infrastructure was supportive of the entire effort. All countries have functional EPI system and experience which was able to absorb the new vaccination campaigns with minimal logistical and financial support.
- d) By all indicators, the vaccine donation initiative and WHO-USAID partnership, particularly AFRO-USAID alliance has reached its goal of access to H1N1 vaccines and did meet the objectives of conducting successful deployment activities in almost all member countries. Quality H1N1 vaccine were made available to vaccinate prioritized population groups in 34 countries in the Region.

### Challenges

- a) By the time H1N1 vaccine deployment activity resumed in December 2009, the epidemic was declining with a sharp drop in reported cases and deaths. This led to the perception that H1N1 has gradually faded and became less of a threat to many health authorities. There was little or no evidence to persuade decision makers to treat H1N1 as an emergency. Deployment activities started accelerating during a period when the progress of the pandemic was decelerating. Entry to post pandemic period when vaccine deployment and vaccination was still in the making was also another challenge that was difficult to relate.
- b) Most countries were unable to commit themselves financially. Except few countries<sup>7</sup> no government was engaged in full or partial cost sharing process. Funding gap was one of the key challenge and one of the delaying factor in NDP approval .
- c) Communication activity and social mobilization effort are key components of a successful vaccine deployment and implementation. However, it was invariably deficient in all countries which deployed H1N1 vaccine. .
- d) The vaccine deployment activity in African region was smooth and problems were minimal. However, there was a felt need to clarify and define leadership at all levels which would make line of command and communication much faster and efficient.

### **E. "Global Deployment and vaccination with Pandemic Influenza Vaccine" from H1N1 Vaccine Deployment Team, WHO-HQ.**

The presentation from WHO-HQ was in two parts, the global preparatory effort for deployment and vaccination on one hand and on allocation and shipment of vaccines and ancillary supplies on the other.

- a) The availability of an updated WHO guideline as a tool was to help in ensuring that countries are committed to a preparedness and response effort during and even before pandemic situation. The guideline provided a framework to develop a vaccine

<sup>7</sup> Botswana, Mauritius and South Africa

deployment plan with all its nine<sup>8</sup> components can be adapted to every condition and circumstance.

- b) In preparing countries for the deployment exercise, 9 workshops<sup>9</sup> were held for all the WHO Regions starting in PAHO and EMRO in July 2009 and concluding in AFRO in November 2009.

### **Challenges:**

- c) Lack of information on the type and quantity of vaccines, and uncertainty on when to receive them were major challenges with implications on timeliness of the plan implementation.
- d) Shortage of funding and related resources, competing priorities posed challenges to many countries which again with an effect to slow down the planning and deployment process.

### **Lessons:**

- e) Because of capacity, experience and resources from SIAs (polio, measles and rubella), deployment of the relatively small quantity of H1N1 vaccines, was not a major issue in most countries. However, existing national preparedness and response plans do not incorporate vaccination as a strategy.
- f) Using the guideline to determine goals and prioritizing target populations was a vital strategy to effectively use the scarce quantity of H1N1 vaccines. Planning in most countries was affected by factors including: uncertainties on details of vaccines, inadequate operational funding, concerns on vaccine safety, regulatory issues all of which had delaying effect on planning.
- g) Communication and information, knowledge on surge capacity in areas of cold chain and waste management were all key components to be addressed.

The second part of the HQ presentation highlighted the background of the vaccine donation initiative, as UNSG<sup>10</sup> and WHO DG call for international solidarity to help 97 beneficiary countries from all WHO regions. It covered issues related to the process of quality, distribution and shipment of donated vaccines.

- a. Only WHO Prequalified vaccines, AD syringes and safety boxes were distributed, by which quality and safety of vaccine products are maintained. Countries were required to issue waiver or fast registration of H1N1 vaccines for faster shipment of vaccines.
- b. Although the pledged quantity of 200 million doses was enough for nearly 10% of the population the 97 beneficiary countries, all that was pledged was not committed, nor all requested by countries was confirmed. Finally, 122.5 (62%) million doses of vaccines was available with matching ancillary supply and almost all the funding was received.

---

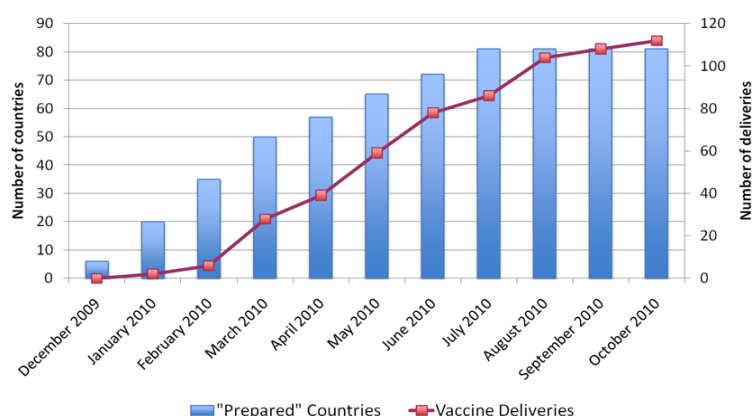
<sup>8</sup> Vaccination strategies, Management of deployment efforts, Legal and regulatory issues, Public communication, Information and communications for deployment and vaccination, Human resources and security, Supply-chain logistic processes, Management of injection waste, Post marketing surveillance, and Termination of deployment operations

<sup>9</sup> Trainings at EMRO and PAHO in July, 2009, EURO and WPRO in August 2009, SEARO in September 2009, EURO II and WPRO II in October 2009, and AMRO III and AFRO I & II in November 2009.,

<sup>10</sup> UNSG United Nations Secretary General

- c. Similarly, supplies that were even committed was not available on time to respond to countries that were waiting for vaccines ready to implement. Although vaccines started coming in November 2009, actual shipment did not start until January 2010 and shipment matched demand from August and September 2010. Pledged financial resources started arriving earlier than vaccines.
- d. The first shipment of vaccines was in January 2010. Since then, a total of 78 million doses of H1N1 vaccine was distributed to 77 countries, which met all requirements (LOI, LOA and NDP). Delays in vaccine delivery was experienced throughout at least until it August 2010, which by then the pandemic was declared over.

Fig. Country preparedness and vaccine shipment trends and gap.



Notes:

- "Preparedness": having signed Agreement and approved Plan (excludes regulatory and logistical obstacles)
- Some "prepared" countries did not ultimately receive a shipment; others received multiple shipments

### Challenges:

- a. Preparatory activities such as LOA, regulatory approval and deployment plan approval took much longer than anticipated.
- b. Insufficient global cold chain capacity for the relatively large volume of supplies, compounded by unfamiliarity to mechanisms by many deployment partners and shipment customization for each country were all logistical challenges.
- c. Along with problems around chartered and commercial flights, interruptions due to unforeseen factors affected the distribution of vaccines and ancillary supplies.

### F. **"H1N1 Vaccine Deployment Activity in West African Sub-Region" presented by IST WEST**

The IST WEST Presentation covering deployment activities in 17 member states which, except Algeria, were all eligible for vaccine donation. IST WEST countries have more or less met all criteria for vaccine donations and have largely implemented campaigns.

- a. . All countries in IST WEST did submit both LOI and all but Benin and Mali submitted LOA as well. Similarly, all countries except Cape Verde, got their NDPs approved at IST, Regional and Headquarter levels. The fact that it involved introduction and use of new pandemic vaccines, registration and other regulatory procedures in almost all countries were less problematic than anticipated.
- b. All thirteen countries which met all the three criteria, received a total of 13.4 million doses of vaccines and matching ancillary supplies. Togo was the first, from both the IST and from the Region as a whole, to implement H1N1 vaccination. Eleven of the thirteen qualified countries have already implemented by the end of October, and the remaining two are scheduled to complete in November, 2010.
- c. As of mid October, 2010, a total of 5.3 million doses of vaccines was administered in IST West reaching approximately 78.5% of the population targeted.
- d. Administration of vaccines resulted in a total of 2,716 AEFI events which was largely minor and localized events. Few serious AEFI cases like in Ghana, were reported to be related to H1N1 vaccines were later disproved by proper investigation. Negative rumors and sometimes false allegations of harmfulness of vaccines suggest the weakness in advocacy, communication and poor social-mobilization.

### Challenges

Poor sensitization of the public, shortage of personnel, and issues such as political rallies and election campaigns had delayed the planning process and implementation.

### Lessons

As evidenced first in Togo and elsewhere, direct involvement of WHO Representatives and MoH authorities encouraged others with tremendous impact on the high turnout of health workers and other target population..

### **G. "H1N1 Vaccine Deployment Activity in Central African Sub-Region" presented by IST CENTRAL**

The Central sub-region (IST CENTRAL) presentation focused on the deployment activities undertaken in six of the 10 eligible countries that met all the criteria.

- a. IST Central comprises of 10 eligible countries, but only seven had their NDP approved. More than 3.7 million doses of vaccines and matching ancillary supplies were shipped to six of them where implementation has so far occurred in only three member states. Three more countries<sup>11</sup>, were set to implement in November 2009 and/or before the expiry date of vaccines in January 2011. .
- b. A total of 587,074 doses of H1N1 vaccine was administered in the three<sup>12</sup> implementing countries with only 180 minor AEFI events. Although, AEFI

<sup>11</sup> Angola, Cameroon and Equatorial Guinea

<sup>12</sup> Sao Tome and Principe, Republic of Congo and Central African Republic.



surveillance was realized to be weak, serious AEFI events were not reported in three of the countries.

- c. The three remaining countries stockpiled a considerable quantity of vaccines between them and are hoped to conduct the vaccination campaign before it expires the latest in January 2011. Significant quantity of vaccine wastage resulting from low uptake, wastage due to using ungraduated 0.5 ml syringes for 0.250 ml vaccine for smaller children is expected to happen in the sub-Region..

### Challenges

Apart from technical difficulties in screening target populations, especially those with chronic illnesses, poor injection waste management as a whole was a universal problem.

### Lessons

The full integration of the technical team (consultants) into the WHO system and benefit from the resources has enabled the team to function well. The successful implementation of deployment plan that is attributable to WHO-USAID partnership is something that need strengthening. High level advocacy and social mobilization activities, especially if planned in good time ahead, has shown a positive influence on the outcome.

## H. **"H1N1 Vaccine Deployment Activity in Southern and Eastern Africa Sub-Region" presented by IST ESA**

The presentation from the South and Eastern sub-region (IST ESA) was covering 19 member countries of which three<sup>13</sup> countries did not finish despite their eligibility. South Africa was not eligible, but gained special status to be donated with vaccine due to the World Cup it hosted.

- a. All countries in IST ESA, except Tanzania and Uganda, complied to submit all the three requirements: LOI, LOA and NDP and qualified to receive vaccines. However, only 15 countries received the supplies while Eritrea's voluntarily withdrawal and Mozambique's failure to enter agreement with WHO led to cancelation of shipment.
- b. About 14.0 million doses of vaccines were shipped to the sub-region including South Africa which got 3.5 million doses of vaccines and ancillary supplies<sup>14</sup>. By the end of October, vaccination campaign was completed in 9 countries<sup>15</sup> and still ongoing in five others<sup>16</sup>. Rwanda is expected to implement before the end of the year. The total cost of operation was approximately \$12.0 m. USD, with WHO covered > 50%.
- c. From fewer reports available so far, H1N1 vaccines were administered to more than 3.3 million persons with an average coverage of 67%, ranging from > 80% in Kenya, Namibia and Zimbabwe, to as low as 21% in Swaziland.

<sup>13</sup> Eritrea, United Republic of Tanzania and Uganda.

<sup>14</sup> South Africa received no ancillary supplies.

<sup>15</sup> Botswana, Kenya, Lesotho, Mauritius, Namibia, Seychelles, South Africa, Swaziland, and Zimbabwe

<sup>16</sup> Comoros, Ethiopia, Madagascar, Malawi and Zambia

- d. The presentation was concluded by recommending improvements at all levels and identifying focal persons who would oversee remaining activities in remaining countries.

### **Challenges**

- i. Other public health priority interventions such as measles outbreak response and polio NIDs explains, at least partially, the delays in progress of some deployment activities.
- ii. Despite the highly needed experience from routine and supplementary immunizations, EPI teams in some countries show hesitation to pro-actively lead the vaccine deployment activity.
- iii. Limitations observed in the cold chain and storage capacity and weaknesses in vaccine handling by central medical stores have all contributed to delays of activities.
- iv. Uncertainty on vaccine delivery dates and frequent changes of vaccine product allocation, were into play to slowing down the progress of deployment activities.

### **Lessons**

- e. There was a visible political will and ownership by MoH of most member countries, to fully implement the deployment activities. Although few in number, the initiation of some countries<sup>17</sup> to fully finance the vaccine deployment activities is a clear evidence of high level commitment. All what they need were some level of technical assistance which the IST team was able to provide.
- f. WHO and USAID partnership has worked well to bring this operation into a successful end.

## **I. PLENARY DISCUSSION**

After having gone through all the presentations, the chairman opened the floor for discussion on all issues that were covered in the day's presentations. The session became a moment where participants thoroughly discussed various issues of relevance not only to what has happened but also to what may happen in the future.

The major areas of discussion, lessons learnt and challenges with a wider implications at present and in the future are presented below.

### **LESSONS LEARNT AND MAJOR CHALLENGES**

The overall outcome of the H1N1 vaccine deployment effort in the African Region was a success. Member states got ACCESS to WHO prequalified quality vaccines. Campaigns were launched targeting prioritized population groups, especially health workers and other high risk groups, which are all stated in the objectives of the initiative. The notable success of the outcome of the initiative in the African Region reflected the concerted effort at all levels. Among others, however, the catalytic role played by the technical teams comprising public health

---

<sup>17</sup> Botswana, Mauritius and South Africa

experts and logisticians at IST and RO levels is viewed as a testimony to yet another successful story of AFRO-USAID partnership.

In reaching such a level of achievement was not without challenges and barriers which some of them were identified during the discussion:

- a) Ensuring preparedness and response to a pandemic situation demands a speedy process and deployment of resources which, unfortunately, was not the case in the African Region. Time elapsed in accomplishing deployment activities, such as signing documents, getting quick response and feedbacks from countries, timely delivery of vaccines and supplies are only few of the examples to mention. With significant delays in vaccine deployment in AFR.
- b) The new WHO guideline was highly instrumental in getting things done: from planning to implementation. However, the guideline was less flexible in some areas such as selection criteria of target population, and prioritization. This has contributed to delays in plan approval for some countries which were ready to do activities in their terms than the criteria on the guideline.
- c) The lengthy and complex nature of the letter of agreement (LOA) loaded with legal language and terminology has in many instances kept health authorities away from signing the document. Although a version in languages other than English was available by request, it was only for comparative verification. The version in English was the one to be signed and one that was legally binding. This clearly contributed for delays in many countries, and may even have led to cancel the vaccine donation altogether.
- d) The effort on communications and public information, advocacy and social mobilization was realized to be inadequate, weak and inconsistent with all other efforts. H1N1 vaccine deployment in general and implementation in particular was vulnerable to allegations on a wide area of issues. Negative information on safety of vaccines, legitimacy of the pandemic as a health threat, uncertainty on targeting pregnant women and health care workers were all contributors to delays, dilemmas and negative campaigns.
- e) As countries moved to meet requirements and readiness to implement, delayed arrival of vaccines was a frustrating experience for some countries that did so much to develop plans and worked hard to meet the criteria but only to wait for vaccines to arrive. Although the problem may have eased towards the last quarter of the deployment activities, it was a reason for delays with a negative impact on implementation.
- f) As H1N1 vaccines were all new, the need to have these products registered and meet all legal and regulatory requirements was a test case in many countries for fast deployment. The experience was both smooth and relatively easy as it was slow and frustrating in some countries.

## RECOMMENDATIONS

After thorough discussion covering all issues of vaccine deployment activity in the Region, the following recommendations were made.

### General

1. The achievements in the H1N1 vaccine deployment activity and its achievements have to be documented and be shared with all stakeholders.
2. The overall achievements are attributable to commitment and a harmonious collaboration between governments, WHO and partners. This collaboration needs to be enhanced further by including more partners and even more units within WHO and other participating organizations.

### Unfinished Vaccine deployment Activity

In conjunction to what has been achieved, there are still some countries which have not completed implementation and which did not submit termination reports. IVD focal persons both at IST and WCO levels should continue to support and monitor activities to ensure completion of deployment activities.

### Vaccines deliveries, registration and waiver

1. Whenever possible, it is highly recommended to supply countries with vaccines of longer shelf life. Once countries are notified on details of vaccine products (types), quantity, and delivery dates, any change on such details need to be minimized or, if possible, avoided altogether.
2. An effort is needed to encourage countries to develop a robust product registration system with shorter dossier than seeking a waiver which in many cases was a barrier causing significant delays.
3. There is a need to explore the possibility of establishing a storage facility at regional and IST levels, which could be of strategic for swift distribution to countries.
4. At times of pandemics and other emergencies that require moving large volume of vaccines, plans to train global logistics should be included.
5. Countries need directives on what to do with the remaining vaccines which in part are already expired.

### Injection Waste Management

The problem regarding injection waste management was consistently reported from all ISTs, implying the urgency and need to deal with the problem not only for pandemics in the future but more importantly for the routine immunization and SIAs. IVD should take the lead to initiate a collaborative effort to addressing this important but seemingly neglected activity.

## **Partnership**

- c) The AFRO-USAID partnership on H1N1 vaccine deployment was well aligned, productive and instrumental for what has been achieved. This model has to be strengthened explore further in scope and depth in more areas of collaboration. The following are few examples:
  - a. Disease and post marketing surveillance
  - b. Laboratory and diagnostic capacity building
  - c. Injection waste management
  - d. Technical support
- d) More work is needed to bring more partners and traditional associates such as UNICEF onboard and review the agenda of collaboration.

## **Research**

1. More research on H1N1 virus, search for vaccines, on clinical and overall epidemiology of the diseases needs to be encouraged.
2. Studies are needed to identify factors related to high performance of countries such as Togo, Zimbabwe and not in others.

## **Training**

In the event WHO-HQ is to conduct training activities and workshops for Regional Offices, it is recommended that HQ build its capacity ( such as TOTs) first before embarking to train WHO Regions with a small team in a long period of time. The H1N1 training workshop for AFRO was possible 6-months after training begun in other Regions.

## **Accountability**

Donors and partners require feedback other than mere acknowledgement of the harmonious cooperation and generosity. Countries should be encouraged to provide the final termination report including reports on how resources were used and on how the country benefited from the collaboration and donation.

## **Health Promotion, Communication and Social mobilization**

In the event of future pandemic or other emergency preparedness and response effort, health promotion activities and social mobilization deserve due attention and utilization. More effort is needed to strengthen these areas.

## ANNEXES

### A. LIST OF PARTICIPANTS

1.	Dr. Francis Kasolo	CDS/AFRO
2.	Dr. Richard Mihigo	IVD/AFRO
3.	Mr. Amos Chweya	IVD/AFRO
4.	Dr. Zenaw Adam	IVD/AFRO
5.	Dr. Tshioko Kwetaminga	CDS/AFRO
6.	Dr. Turuku	CDS/AFRO
7.	Dr. Patrick Byaruhanga	IVD/IST WEST
8.	Mr. Jean Ngantchou	IVD/IST WEST
9.	Mr. Seka Leone	IVD/IST CENTRAL
10.	Dr. Afework Assefa,	IVD/IST SOUTH & EAST
11.	Mr. Abdulquadir Oni	IVD/IST SOUTH & EAST
12.	Dr. Michel Othepa	MCHIP/USAID
13.	Mr. Ousmane Dia	DELIVER/USAID
14.	Dr. Claudia Vivas	WHO/HQ
15.	Ms. Lisa Hedman	WHO/HQ
16.	Dr. Mala Rakoto	IVD/AFRO
17.	Dr. Salla Mbaye	IVD/AFRO
18.	Dr. Akanmori Barthelemy	IVD/AFRO
19.	Dr. Silveira Concercao	CDS/AFRO

## MEETING ON PICTURES



**Left to Right, Front row:** Patrick B, Akanmori B., Claudia V., Kasolo F., Mihigo R., Adam Z.,  
**Back Row:** Nganchou J., Hedman L., Seka L., Tshioko K., Assefa A., Oni A., Ousmaine D., Chweya A.









**Pandemic Influenza A (H1N1) Vaccine Deployment Activities –  
Debriefing Meeting  
27 October, 2010, Brazzaville, Congo**

**programme:**

<b>No.</b>	<b>Time</b>	<b>Topic</b>	<b>Presentation by</b>
1	8:30-8:45	Introduction of participants	
2	8:45-9:00	Welcoming and opening address	ARD
3	9:00-9:20	Influenza A (H1N1) pandemic response efforts in AFR	DPC
4	9:20-9:40	Influenza A (H1N1) pandemic vaccine deployment activities in AFR.	IVD
5	9:40-10:00	Influenza A (H1N1) pandemic vaccine deployment activities: global perspectives	WHO-HQ
6	10:00-10:30	Discussion	
<b>6</b>	<b>10:30-11:00</b>	<b>COFFEE BREAK</b>	
7	11:00-11:20	Vaccine deployment activities in IST West	IST West
8	11:20-11:40	Vaccine deployment activities in IST Central	IST Central
9	11:40-12:00	Vaccine deployment activities in IST South and East	IST South and East
10	12:00-13:00	Discussion	
<b>11</b>	<b>13:00-14:00</b>	<b>LUNCH BREAK</b>	
12	14:00-14:20	Pandemic preparedness and response: lessons learnt and the way forward	USAID
13	14:40-14:40	Discussions	
14	14:40-16:00	Open discussions on future collaboration	Participants
15	16:00-16:15	Closing Remarks	ARD