Global survey on National Vaccine Deployment and Vaccination Plans for pandemic A(H1N1) 2009 vaccine – 2010

Report of Findings

World Health Organization

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Contents

Abbreviations and acronyms

AEFI	adverse effects following immunization
AFR	WHO African Region
AFRO	WHO Regional Office for Africa
AMR	WHO Region of the Americas
AMRO/PAHO	WHO Regional Office for the Americas/Pan American Health Organization
EMR	WHO Eastern Mediterranean Region
EMRO	WHO Regional Office for the Eastern Mediterranean
EUR	WHO European Region
EURO	WHO Regional Office for Europe
GAP	global pandemic influenza action plan to increase vaccine supply
MS	WHO Member States
NDVP	national deployment and vaccination plan
SAGE	Strategic Advisory Group of Experts on Immunization
SEAR	WHO South-East Asia Region
SEARO	WHO Regional Office for South-East Asia
UNICEF	United Nations Children's Fund
VENICE	Vaccine European New Integrated Collaboration Effort
WPR	WHO Western Pacific Region
WPRO	WHO Regional Office for the Western Pacific

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Africa Region: Central African Republic, Congo, Gambia, Guinea, Lesotho, Liberia, Mauritania, Namibia, Niger, Sao Tomé et Principe, Senegal, Seychelles, Sierra Leon, and Togo.

Americas Region: Argentina, Barbados, Belize, Bolivia, Brazil, the Cayman Islands, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Grenada, Guatemala, Guyana, Honduras, Jamaica, Nicaragua, Panama, Paraguay, Saint Lucia, Suriname, Trinidad and Tobago, and Uruguay.

Eastern Mediterranean Region: Afghanistan, Bahrain, Egypt, Iran, Jordan, Lebanon, Oman, and the Syrian Arab Republic.

European Region: Armenia, Azerbaijan, Georgia, Kosovo, Kyrgyzstan, the Republic of Moldova, and Tajikistan.

South East Asia Region: Bangladesh, Indonesia, Maldives, Nepal, Sri Lanka, Thailand, and Timor-Leste.

Western Pacific Region: Australia, Cambodia, China, Cook Islands, Fiji, Kiribati, Lao People's Democratic Republic, Malaysia, Marshall Islands, Mongolia, Nauru, New Caledonia, New Zealand, Niue, Palau, Papua New Guinea, Philippines, the Republic of Korea, Samoa, Singapore, Solomon Islands, Tokelau, Tonga, Tuvalu, and Vanuata.

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EXECUTIVE SUMMARY

Globally, influenza is a significant public health issue and vaccination is one of the most important medical interventions that can be used for reducing morbidity and mortality. On 11 June 2009, the World Health Organization (WHO) raised its pandemic alert to the highest level in view of the rapid global spread of the A(H1N1)pdm 2009 virus. With support from and in collaboration with Member States and partners, WHO strengthened its pandemic preparedness and response activities. Vaccination is crucial to pandemic mitigation efforts and the availability of pandemic vaccine, particularly in low and middle income countries, proved challenging. Many Member States and partners pledged support, including vaccines and additional resources for countries in need of the pandemic A(H1N1) 2009 vaccine. WHO set out a two-phase approach for supplying vaccines sufficient for immunizing 10% of the population in eligible countries based on the timing required to fulfill the pledges from Member States and partners.

The aim of this study is to assess the degree to which national pandemic vaccine deployment and vaccination plans (NDVPs) were implemented and to consolidate and distil lessons learned from the six WHO regions in an effort to improve future planning and to identify information that may have general applications.

In total, 84 out of 194 Member States (43%), including 51 out of 77 Member States (66%) who were eligible for and received WHO vaccine, participated in the survey (Table 1). In addition to the survey entries, further verifiable data were obtained from NPVD activity reports from countries.

The major findings of the survey include:

- Out of a total of 1.18 billion doses of pandemic A(H1N1) 2009 vaccine received by 163 countries, WHO provided 78.06 million doses to 77 countries through the WHO Pandemic Influenza A(H1N1) Vaccine Deployment Initiative. Demand for vaccines varied with the changing epidemiology of the pandemic as the virus spread across the globe and, as the level of concern about the virus diminished, demand for vaccine was reduced. The cost of vaccination was also a constraining factor for countries and limited the quantity of and demand for vaccine. This factor became more important as the level of concern for the pandemic decreased.

- The main suppliers of pandemic A(H1N1) 2009 vaccines included GlaxoSmithKline, Novartis, and Sanofi Pasteur, supplemented by Butantan, Green Cross, and MedImmune.

- Of the countries participating in this survey, 55% indicated that they implemented all activities as spelled out in their NDVPs. In most regions, countries reported high percentages of supervisory visits executed, with supervisors providing final reports on vaccine deployment and vaccination activities in countries where vaccination campaigns were completed.

- Overall, 56% of countries across all of the regions reported having sufficient supply chain and logistics capacity, with the exception of communications hardware, to deploy and administer pandemic A(H1N1) 2009 vaccines. Likewise, 68% of responding countries reported that vaccine and ancillary items were delivered to 80% of end users within seven days of receiving their material.

- With regard to public information and communications, the public's main concerns were vaccine safety as reported by 86% of countries, the need for the vaccine (75%), vaccine

efficacy (50%), and vaccine benefits (25%). Communication strategies were developed for various priority groups including health-care workers, pregnant women, persons with chronic medical conditions, and essential personnel, along with children and persons over 65 years of age.

- The majority of countries (85%) reported having a functioning adverse effects following immunization (AEFI) surveillance system during vaccination campaigns. In countries with no such system, reporting sheets and standard operating procedures (SOP) were developed for AEFI associated with pandemic A(H1N1) 2009 vaccination.

Lessons learned most frequently concerned communications. Many countries recommended improving public communications campaigns, enhancing pre-campaign education, providing better focus on priority groups, and effectively and vigorously addressing all anti-vaccination rumors. Vaccine availability needs to be timely and refrigeration infrastructure needs to be enhanced and better maintained. Planning and supervision need to be supported with better information and also logistics and management need to be based on a multi-sectoral approach, with campaign coordination beginning at least several weeks before activities are set in motion.

Pandemic preparedness is an ongoing concern, and this study provides information about the degree to which NDVPs were implemented in the deployment and utilization of pandemic A(H1N1) 2009 vaccines. It has also identified strengths and weaknesses in implementing the constitutive activities of these plans. This information, along with the lessons learned and guidance developed, will be useful for future pandemic planning and will also direct attention to those regions and countries where help is most needed.