How to implement influenza vaccination of pregnant women

An introduction manual for national immunization programme managers and policy makers



This document was produced by the Initiative for Vaccine Research (IVR) of the Department of Immunization, Vaccines and Biologicals

Ordering code: WHO/IVB/16.06 Published: November 2017

This publication is available on the Internet at:

http://www.who.int/immunization/research/development/influenza_maternal_immunization/en/index1.html

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The named authors [or editors as appropriate] alone are responsible for the views expressed in this publication.

Acknowledgements

This manual has been developed by WHO under the guidance of a lead writing group of experts, including: Edwin Asturias, Susan Chu, Supamit Chunsuttiwat, Jessica Fleming, Francois Gasse, Yirgu Gebrehiwot, Gretchen Heinrichs, Terri Hyde, Osman David Mansoor, Jean-Marc Olive, Carla Vizzotti, Susan A. Wang. Experts of WHO supporting this group included Dicky Akanmori, Oleg Benes, Maurice Bucagu, James Heffelfinger, Joachim Hombach, Shin Jinho, Pernille Jorgensen, Gunta Lazdane, Philipp Lambach, Assumpta Muriiti, Justin R Ortiz, Alba Maria Ropero-Alvarez, Arun Bhadra Thapa, Özge Tuncalp, Pushpa Ranjan Wijesinghe, Ahmadu Yakubu.

The work of this group was reviewed by Pradip Awate, Eduardo Azziz-Baumgartner, Barbara Jauregui, Nathalie Likhite, Meredith McMorrow, Clint Pecenka, Flor M Munoz, Pierre van Damme, Wayne Ramkrishna, Laura Elizabeth Riley, Gayane Sahakyan, Nayana Yasindu Samaraweera, Veronika Shimanovich, Stefano Tempia, Margaret Watkins, Gerd Zettlmeissl, and the WHO Immunization Practices Advisory Committee (IPAC), and the following WHO experts: Jhilmil Bahl, Nyambat Batmunkh, Madhava Ram Balakrishnan, Terry Besselaar, Paulus Bloem, Adam L. Cohen, M. Carolina Danovaro, Philippe Duclos, Rudi Eggers, Godwin Enwere, Julia Fitzner, Marta Gacic-Dobo, Tracey Goodman, Carmen Rodriguez Hernandez, Siddhivinayak Hirve, Raymond Hutubessy, Souleymane Kone, Olivier Lapujade, Patrick Lydon, Carsten Mantel, Claudio Politi, Stephanie Mariat, Melanie Marti, Gill Mayers, Lisa Menning, Liudmila Mosina, Leopold Ouedraogo, Marc Perut, Andreas Reis, Kamel Senouci, Erin Sparrow, Patrick Zuber, Wenqing Zhang, Weigong Zhou.

Financial support for the development and pilot-testing of this manual was provided by the Bill & Melinda Gates Foundation.

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Abbreviations

AEFI Adverse event following immunization

ALRI Acute lower respiratory infection

cMYP Comprehensive multi-year plan

DQS Data quality self-assessment

EPI Expanded programme on immunization

ERL Essential Regulatory Laboratory

GACVS Global Advisory Committee on Vaccine Safety

HA Haemagglutinin

HIV Human immunodeficiency virus

HSA Health surveillance assistant (Malawi)

ICC Inter-agency coordinating committee

IEC Information, education and communication

ILI Influenza-like illness

KABP Knowledge, attitudes, beliefs and practicesLMIS Logistics management information system

M&E Monitoring and evaluationNIC National Influenza Centre

NITAG National Immunization Technical Advisory Group

PAHO Pan American Health Organization

PIE Post-introduction evaluation

RMNCAH Programme manager for reproductive, maternal, newborn, child and

adolescent health

RMSD Regional Medical Supply Division (Sri Lanka)

SAGE WHO's Strategic Advisory Group of Experts on Immunization

SARI Severe Acute Respiratory Infection

TT2+ Reported number of second, third, fourth and fifth doses of TT administered

to pregnant women during a calendar year

UNICEF United Nations Children's Fund

VVM Vaccine vial monitor

WHO World Health Organization

1. Executive summary

WHO's influenza recommendations aim to protect vulnerable high-risk groups from severe disease[1]. In 2012, WHO published a position paper on influenza vaccine which identified pregnant women as the highest priority group for countries considering initiation or expansion of programmes for seasonal influenza vaccination. Influenza vaccination of pregnant women will protect both the mother and her young infant against influenza as there is no licensed vaccine available for neonates up to 6 months after birth [2]. Giving influenza vaccines to pregnant women is safe and has proven to be efficacious, preventing laboratory-confirmed influenza in 35–70% of mothers and 28–61% of infants under 6 months of age [3–5]. Maternal influenza vaccination programmes have the potential to augment/reinforce existing vaccination programmes and the maternal and child health infrastructure as well as to establish a delivery platform for future vaccines targeting these high-risk groups. In addition to protecting against yearly influenza outbreaks, a seasonal influenza vaccination programme can support countries' planning efforts for a potential pandemic by increasing their capacity to produce or procure vaccines, to register and distribute them, to conduct targeted vaccine delivery, and to monitor vaccination coverage and effectiveness [6].

Vaccination programmes should be based on scientifically sound and cost-effective approaches. It is essential that sufficient human resources and training capacity are present when planning the introduction of a new vaccine. For maternal immunization, a communication strategy should be in place to address potential concerns about the use of the vaccine in pregnant women. As expanded service delivery may put additional stress on health systems, decision-makers should assess the impact of the vaccine's introduction on the interconnected components of the health system.

Structure of the manual

This manual has two main parts:

- decision-making at country level, aimed at policy-makers (section 4), and
- issues concerning vaccine introduction planning and implementation, aimed at national immunization programme managers and immunization partners (sections 5–7).

Annexes at the end of the manual and links throughout provide planning and assessment tools for policy-makers and programme managers.

Main points addressed in the manual

- 1. Background and rationale for implementation of maternal influenza vaccination.
- 2. Key policy decisions in considering vaccination implementation.
- **3.** Practical guidance for vaccine programme implementers, including: tools for planning the introduction of the vaccine (addressing infrastructure and supply chain management), staff training and communication strategies, and monitoring and evaluation.

2. About this manual

Objective

This manual serves as a primary resource and a catalogue of optional tools to help users to decide, plan and implement maternal influenza vaccination strategies and to foresee and address potential challenges related to decision-making or implementation. The manual aims to guide countries by providing principles and considerations to support decision-making and introduction planning rather than prescribing introduction measures that may not be applicable in some country contexts.

The manual focuses on the introduction of maternal influenza vaccination with inactivated seasonal influenza vaccine (subsequently referred to as "influenza vaccine"), and aims to:

- inform discussions on policy and assist with decision-making processes for introduction of influenza vaccine compared to other health interventions;
- provide an operational design framework for a delivery system for influenza vaccines for pregnant women;
- provide suggestions for developing a service delivery plan, including using local/ regional influenza epidemiology and seasonality trends to guide vaccine provision, timing and strategies;
- provide an overview of monitoring and evaluation considerations specific to maternal influenza vaccination.

In addition, this manual outlines:

- 1. how to integrate influenza vaccine into an existing antenatal care system, and
- 2. how to prepare the national immunization programme to expand its activities in order to target pregnant women (Figure 1).

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