

Maternal Immunization and Antenatal Care Situation Analysis

Report of the MIACSA
project 2016–2019



**World Health
Organization**

Maternal Immunization and Antenatal Care Situation Analysis

REPORT OF THE MIACSA PROJECT
2016–2019

Maternal immunization and antenatal care service delivery situation analysis: report of the MIACSA project, 2016–2019

ISBN 978-92-4-000401-6 (electronic version)

ISBN 978-92-4-000402-3 (print version)

© World Health Organization 2020

Some rights reserved. This work is available under the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 IGO licence (CCBY-NC-SA 3.0 IGO; <https://creativecommons.org/licenses/by-nc-sa/3.0/igo>).

Under the terms of this licence, you may copy, redistribute and adapt the work for non-commercial purposes, provided the work is appropriately cited, as indicated below. In any use of this work, there should be no suggestion that WHO endorses any specific organization, products or services. The use of the WHO logo is not permitted. If you adapt the work, then you must license your work under the same or equivalent Creative Commons licence. If you create a translation of this work, you should add the following disclaimer along with the suggested citation: "This translation was not created by the World Health Organization (WHO). WHO is not responsible for the content or accuracy of this translation. The original English edition shall be the binding and authentic edition".

Any mediation relating to disputes arising under the licence shall be conducted in accordance with the mediation rules of the World Intellectual Property Organization.

Suggested citation. Maternal immunization and antenatal care service delivery situation analysis: report of the MIACSA project, 2016-2019. Geneva: World Health Organization; 2020. Licence: [CCBY-NC-SA 3.0 IGO](https://creativecommons.org/licenses/by-nc-sa/3.0/igo).

Cataloguing-in-Publication (CIP) data. CIP data are available at <http://apps.who.int/iris>.

Sales, rights and licensing. To purchase WHO publications, see <http://apps.who.int/bookorders>. To submit requests for commercial use and queries on rights and licensing, see <http://www.who.int/about/licensing>.

Third-party materials. If you wish to reuse material from this work that is attributed to a third party, such as tables, figures or images, it is your responsibility to determine whether permission is needed for that reuse and to obtain permission from the copyright holder. The risk of claims resulting from infringement of any third-party-owned component in the work rests solely with the user.

General disclaimers. 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 WHO 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 and dashed 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 WHO 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 WHO 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 WHO be liable for damages arising from its use.

This publication contains the collective views of an international group of experts and does not necessarily represent the decisions or the policies of WHO.

Contents

Abbreviations	iv
Acknowledgements	v
Executive summary	1
Introduction	1
Objectives and aims	1
Methods	1
Findings	2
1. Introduction	11
1.1 Background	11
1.2 Conceptual framework	13
2. Study methodology	17
2.1 Study design and sources of data	18
2.2 Key definitions and indicators	20
2.3 Statistical analysis	21
2.4 Study limitations	22
3. Results	25
3.1 Maternal immunization performance indicators	25
3.2 Leadership and governance	29
3.3 Antenatal care service delivery	42
3.4 Human resources	46
3.5 Health financing	51
3.6 Information systems	56
3.7 Logistics, infrastructure	67
3.8 Demand creation	72
3.9 Vaccine hesitancy/confidence	73
4. Associations between health system factors and maternal tetanus immunization	77
5. Discussion, conclusion, recommendations	83
References	91
Annexes	95

Abbreviations

AEFI	adverse event following immunization
ANC	antenatal care
ANC1	proportion of pregnant women who received one ANC contact during their last pregnancy
ANC4+	proportion of pregnant women who received four or more ANC contacts during their last pregnancy
BCG	Bacillus Calmette-Guérin
CHW	community health worker
CI	confidence interval
DTP	diphtheria, pertussis and tetanus
DTP1	first dose of diphtheria, tetanus and pertussis vaccine
DTP3	third dose of diphtheria, tetanus and pertussis vaccine
EPI	Expanded Programme on Immunization
EVM	effective vaccine management
HMIS	health monitoring and information system
LCA	latent class analysis
LMICs	low- and middle-income countries
MIACSA	Maternal Immunization and Antenatal Care Situation Analysis
MNCAH	maternal, newborn, child and adolescent health
NITAG	national immunization technical advisory group
NRA	National Regulatory Authority
PAB	protection at birth
TT	Tetanus toxoid
TT2+	at least two doses of tetanus toxoid vaccine during pregnancy
UNDP	United Nations Development Programme
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
WHO	World Health Organization
WUENIC	WHO/UNICEF estimates of national immunization coverage

Acknowledgements

This report was drafted by Sonja Merten under supervision of the World Health Organization (WHO) Departments of Immunization, Vaccines and Biologicals, and Maternal, Newborn, Child and Adolescent Health.

It was informed and reviewed by the contributions of the following individuals:

- Expert advisory panel: Mercy Ahun, Martina Baye, Veena Dhawan, Pradeep Haldar, Michelle Giles (co-chair), Matthews Mathai, Flor Muñoz (chair)
- Consultants: Steve Black, Carsten Mantel, Elizabeth Mason, Jayani Pathirana, Sara Rendell
- Additional national and international experts: Xavier Bosch-Capblanch, Mari Dumbaugh, Langelihle Mlotshwa, Christian Schindler, Ahmadu Yakubu
- WHO: Theresa Diaz, Laure Dumolard, Joachim Hombach, Elisabeth Katwan, Philipp Lambach, Laura Nic Lochlainn, Allisyn Moran, Marc Perut, Nathalie Roos, Dilip Thandassery, Özge Tunçalp, Emily Wootton, Nasir Yusuf.

The World Health Organization thanks the Bill and Melinda Gates Foundation for providing financial support for the MIACSA project under the BMGF grant agreement OPP1156378.



Executive summary

Introduction

Vaccine-preventable diseases are among the main causes of global child morbidity and mortality, particularly in low- and middle-income countries (LMICs). Maternal vaccines given to pregnant women in the second or third trimester have emerged as a promising way to address vaccine-preventable diseases, providing protection to the newborn during the most vulnerable period in life, through the trans-placental transfer of maternal antibodies. Antenatal care (ANC) is generally accepted as the natural entry point for interventions during pregnancy, including maternal immunization. But despite progress made in ANC use, the World Health Organization (WHO) estimates that between 2010 and 2016, only 61.8% of pregnant women attended at least four ANC visits, constraining the time points when vaccination might occur. This calls for better understanding of the optimal ways to deliver vaccines to pregnant women and the value of using ANC services as a delivery platform.

A multi-method study, the Maternal Immunization and Antenatal Care Situation Analysis (MIACSA), was conducted between November 2016 and June 2019 (32 months) aiming to explore current and future preparedness to introduce and implement new maternal vaccines. To learn from experience and to prepare for the introduction of new maternal vaccines, the MIACSA study set out to investigate maternal tetanus immunization programmes, which have been in place for the past three decades and are the most widely implemented vaccination programmes in pregnancy.

The project aimed to develop a typology of health systems in terms of how they are delivering vaccines to pregnant women, to understand what system attributes correlate with high performance in the delivery of vaccines to pregnant women, and to assess the path forward for introducing additional vaccines for pregnant women.

Objectives and aims

The MIACSA project set out to investigate ongoing maternal tetanus immunization programmes in LMICs. More specifically the MIACSA project aims to:

- improve the understanding of the challenges and successes of ANC and EPI services in implementing maternal immunization with tetanus toxoid and other maternal vaccines.
- inform the sustainability strategy of the maternal and neonatal tetanus elimination initiative.

预览已结束，完整报告链接和二维码如下：

https://www.yunbaogao.cn/report/index/report?reportId=5_24700

