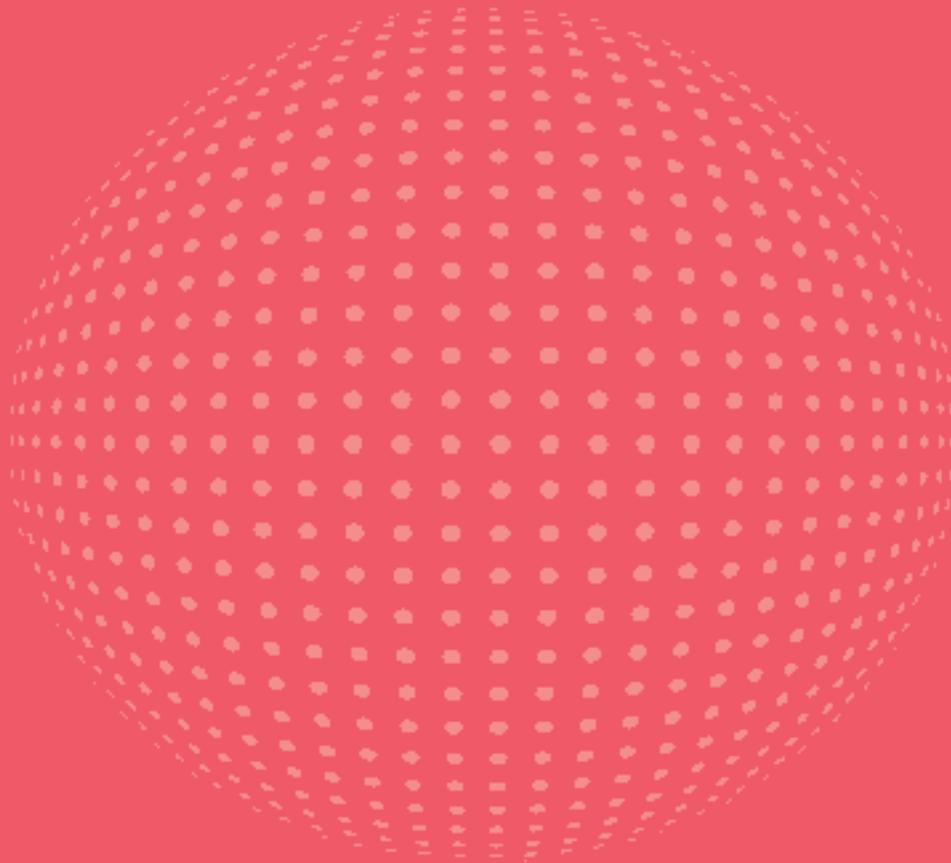


# Monitoring emergency obstetric care



a handbook



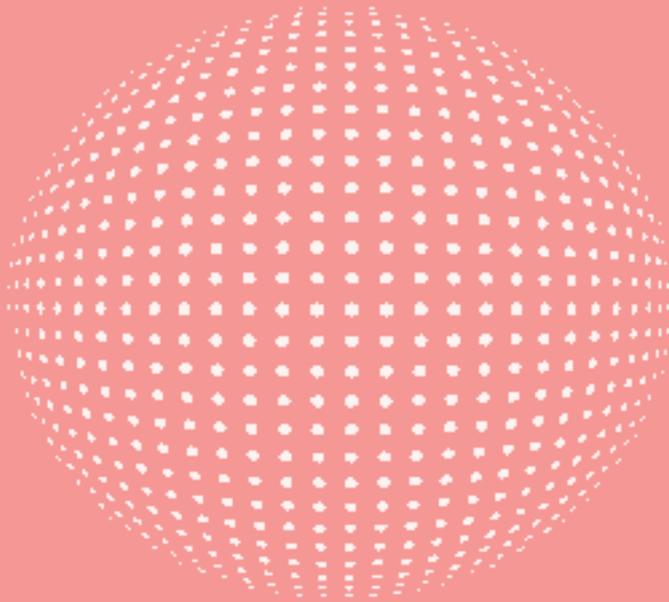


# Monitoring emergency obstetric care



## a handbook





**WHO Library Cataloguing-in-Publication Data :**

Monitoring emergency obstetric care: a handbook.

1.Obstetrics - standards. 2.Emergency services, Hospital - statistics and numerical data. 3.Data collection - methods. 4.Quality indicators, Health care. 5.Maternal health services - supply and distribution. 6.Maternal mortality - prevention and control. 7.Handbooks. I.World Health Organization. II.United Nations Population Fund. III.UNICEF. IV.Mailman School of Public Health. Averting Maternal Death and Disability.

ISBN 978 92 4 154773 4

(NLM classification: WA 310)

**© World Health Organization 2009**

All rights reserved. Publications of the World Health Organization can be obtained from WHO Press, World Health Organization, 20 Avenue Appia, 1211 Geneva 27, Switzerland (tel.: +41 22 791 3264; fax: +41 22 791 4857; e-mail: [bookorders@who.int](mailto:bookorders@who.int)). Requests for permission to reproduce or translate WHO publications – whether for sale or for noncommercial distribution – should be addressed to WHO Press, at the above address (fax: +41 22 791 4806; e-mail: [permissions@who.int](mailto:permissions@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.

Printed in

# Contents

<b>Abbreviations</b>	<b>iv</b>
<b>Acknowledgements</b>	<b>v</b>
<b>Preface</b>	<b>vi</b>
<b>Executive summary</b>	<b>vii</b>
<b>1. INTRODUCTION</b>	<b>1</b>
1.1 Overview of indicators	4
1.2 Signal functions of EmOC	6
1.3 Use of the EmOC indicators	9
<b>2. INDICATORS FOR EmOC</b>	<b>10</b>
2.1 Indicator 1: Availability of EmOC services	10
2.2 Indicator 2: Geographical distribution of EmOC facilities	13
2.3 Indicator 3: Proportion of all births in EmOC facilities	16
2.4 Indicator 4: Met need for EmOC	19
2.5 Indicator 5: Caesarean sections as a proportion of all births	25
2.6 Indicator 6: Direct obstetric case fatality rate	31
2.7 Indicator 7: Intrapartum and very early neonatal death rate	34
2.8 Indicator 8: Proportion of deaths due to indirect causes in EmOC facilities	36
2.9 Summary and interpretation of indicators 1–8	38
<b>3. COLLECTING DATA FOR THE INDICATORS</b>	<b>43</b>
3.1 Types of data required	43
3.2 Preparation	43
3.3 Form 1: All potential EmOC facilities in selected areas	46
3.4 Form 2: Review of EmOC at facilities	48
3.5 Form 3: Summary of data on EmOC facilities in an area	50
3.6 Form 4: Calculation of indicators for each area	51
3.7 Form 5: Calculation of indicators for the country	51
3.8 Monitoring at the area level	51
<b>REFERENCES</b>	<b>54</b>
<b>APPENDIX A: Forms and worksheets for data collection and calculation of EmOC indicators</b>	<b>61</b>
Form 1. List of possible EmOC facilities	63
Form 2. Review of possible EmOC facilities	69
Form 3. Summary of data on EmOC facilities in the area	85
Form 4. Calculation of indicators for geographical area	107
Form 5. Calculation of indicators for a country	123
<b>APPENDIX B: Information on registers and data collection</b>	<b>145</b>
<b>APPENDIX C: Random number table</b>	<b>151</b>

## Abbreviations

AMDD	Averting Maternal Death and Disability Program
EmOC	Emergency Obstetric Care
HIV	Human immunodeficiency virus
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
WHO	World Health Organization

## Acknowledgements

*Monitoring emergency obstetric care: a handbook* was prepared by Deborah Maine (Boston University, Boston, Massachusetts, United States of America, and the Averting Maternal Death and Disability Program (AMDD), Mailman School of Public Health, Columbia University, New York City, New York, United States), Patsy Bailey (Family Health International, Research Triangle Park, North Carolina, United States, and AMDD), Samantha Lobis (AMDD) and Judith Fortney (AMDD).

The handbook is based on the publication *Guidelines for monitoring the availability and use of obstetric services* (1997) prepared by Deborah Maine, Tessa Wardlaw (UNICEF) and a team from Columbia University (Victoria Ward, James McCarthy, Amanda Birnbaum, Murat Alkalin and Jennifer Brown), and on recommendations made during a technical consultation held in 2006 at WHO in Geneva, in which the following persons participated: Patsy Bailey (Family Health International and AMDD), Shelah Bloom (University of North Carolina, Chapel Hill, North Carolina, United States), David Braunholtz (Initiative for Maternal Mortality Programme Assessment (IMMPACT) Project, University of Aberdeen, Aberdeen, Scotland), Vincent de Brouwere (Prince Leopold Institute of Tropical Medicine, Antwerp, Belgium), Marc Derveeuw (UNFPA), Hemant Dwivedi (UNFPA), Øystein Evjen Olsen (Institute for Health Research and Development and Primary Health Care, Iringa, United Republic of Tanzania), Vincent Fauveau (UNFPA), Judith Fortney (AMDD), Lynn Freedman (AMDD), Joan Healy (Ipas, Chapel Hill, North Carolina, United States) Justus Hofmeyr (University

of the Witwatersrand, Johannesburg, South Africa), Samantha Lobis (AMDD), Deborah Maine (Boston University, Boston, Massachusetts, United States, and AMDD), Saramma Mathai (UNFPA), Affette McCaw-Binns (University of the West Indies), Isabelle Moreira (UNFPA), Luwei Pearson (UNICEF), Rosalind Raine (University College London, London, England), Geetha Rana (UNICEF), Judith Standley (UNICEF), Nancy Terreri (UNICEF), Kanako Yamashita-Allen (World Bank, Washington DC, United States), Jelka Zupan (WHO), Katherine Ba-Thike (WHO), Alexis Ntabona (WHO), Matthews Matthai (WHO).

Lale Say (WHO) helped in revision of the handbook by facilitating the technical consultation, reviewing draft versions, and coordinating the publishing process. Vincent Fauveau (UNFPA), Judith Standley (UNICEF) and Lynn Freedman (AMDD) reviewed many drafts within their organizations. Jennifer Potts (AMDD) and Vincent de Brouwere reviewed several versions and made substantive contributions to the text. Yves Bergevin (UNFPA), Luc de Bernis (UNFPA), Juliana Bol (RAISE Initiative, Columbia University, New York City, New York, United States), Sara Casey (RAISE Initiative), France Donnay (UNFPA), Metin Gulmezoglu (WHO), Joan Healy (Ipas), Rita Kabra (WHO), Barbara Kwast (AMDD), Carine Ronsmans (London School of Hygiene and Tropical Medicine, London, England) and Cynthia Stanton (Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland, United States) also reviewed the handbook. Lucy Anderson, Alexandra DelValle, Gina Gambone, Laura Harris, and Christen Mullen helped in compilation of the references. Paul Van Look reviewed the text.

## Conflict of interest

The participants of the technical consultation were primarily independent experts from academia. No conflicts of interest were declared. Other participants included staff from WHO, UNFPA, UNICEF, and

Columbia University who have been engaged in in-country application of the indicators reviewed at the consultation.

## Preface

Efforts to improve the lives of women and children around the world have intensified since world leaders adopted the United Nations Millennium Declaration in September 2000 and committed themselves to reaching Millennium Development Goals 4 and 5, on child mortality and maternal health. The original targets for these Goals were a two-thirds reduction in the mortality of children under 5 and a three-quarters reduction in the maternal mortality ratio between 1990 and 2015. There is worldwide consensus that, in order to reach these targets, good-quality essential services must be integrated into strong health systems. The addition in 2007 of a new target in Goal 5—universal access to reproductive health by 2015—reinforces this consensus: all people should have access to essential maternal, newborn, child and reproductive health services provided in a continuum of care.

In order to reduce maternal mortality, Emergency Obstetric Care (EmOC) must be available and accessible to all women. While all aspects of reproductive

health care including family planning and delivery with the help of a skilled health professional also plays an important role in reducing maternal and neonatal mortality, this handbook focuses on the critical role of EmOC in saving the lives of women with obstetric complications during pregnancy and childbirth and saving the lives of newborns intrapartum. The handbook describes indicators that can be used to assess, monitor and evaluate the availability, use and quality of EmOC.

Whilst this handbook focuses on emergency care, a broader set of indicators should be used to monitor fundamental aspects of reproductive health programmes designed to reduce maternal mortality, ensure universal access to reproductive health care and reduce child mortality.

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\\_29213](https://www.yunbaogao.cn/report/index/report?reportId=5_29213)

