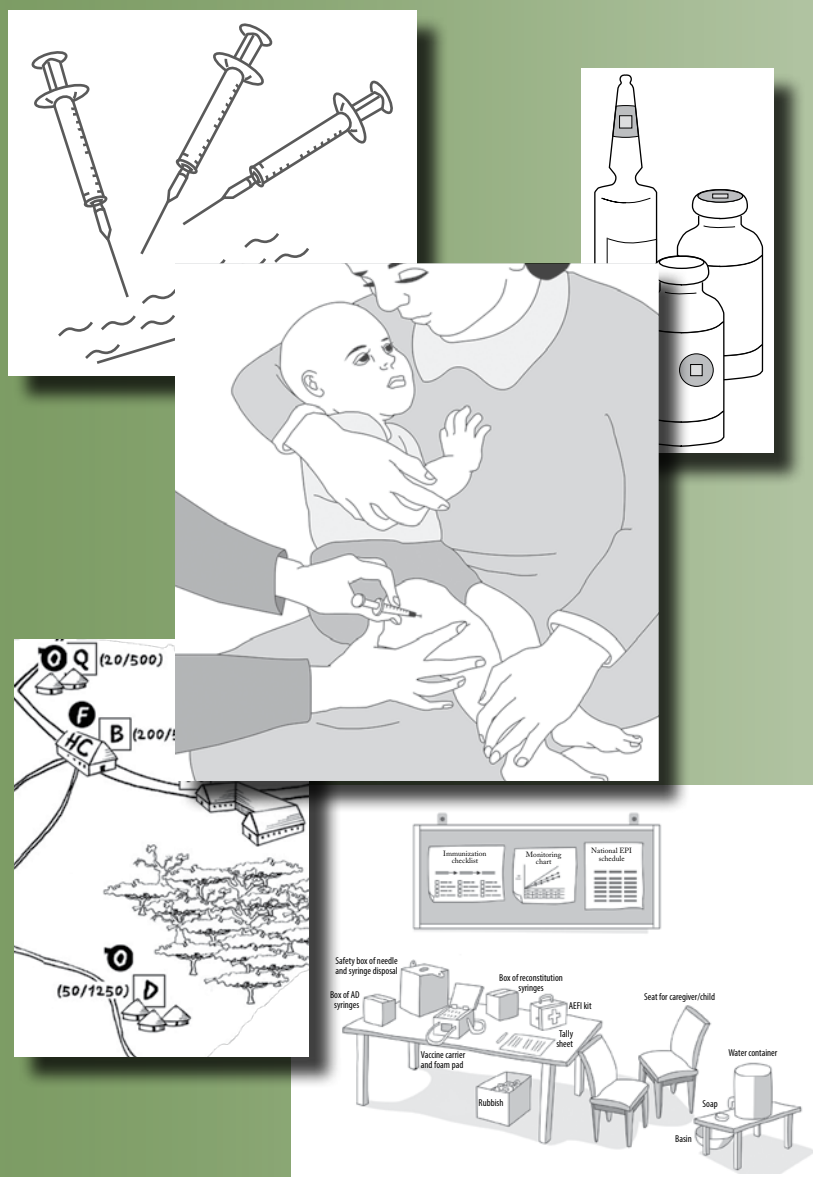


Immunization in Practice

A practical guide for health staff

2015 update



1 Diseases and vaccines

2 The vaccine cold chain

3 Ensuring safe injections

4 Microplanning for reaching every community

5 Managing an immunization session

6 Monitoring and surveillance

7 Partnering with communities



World Health
Organization



WHO Library Cataloguing-in-Publication Data

Immunization in practice: a practical guide for health staff – 2015 update.

Contents: Module 1: Target diseases and vaccines -- Module 2: The vaccine cold chain -- Module 3: Ensuring safe injections -- Module 4: micro planning for reaching every community -- Module 5: Managing an immunization session -- Module 6: Monitoring and surveillance -- Module 7: Partnering with communities

1.Vaccination. 2.Immunization Programs. 3.Vaccines. 4.Cold Chain. 5.Injections – standards. 6.Handbooks. 7.World Health Organization.

ISBN 978 92 4 154909 7

(NLM classification: WA 115)

© World Health Organization 2015

All rights reserved. Publications of the World Health Organization are available on the WHO website (www.who.int) or can be purchased 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).

Requests for permission to reproduce or translate WHO publications –whether for sale or for non-commercial distribution– should be addressed to WHO Press through the WHO website (www.who.int/about/licensing/copyright_form/en/index.html).

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 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 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 China

Contents

Abbreviations and acronyms.....	iii
Acknowledgements.....	v
Preface.....	vi

Module 1: Target diseases and vaccines

1. Diphtheria.....	(1)7
2. <i>Haemophilus influenzae</i> type b disease.....	(1)11
3. Hepatitis B.....	(1)15
4. Human papillomavirus infection and cervical cancer.....	(1)19
5. Japanese encephalitis.....	(1)23
6. Measles.....	(1)28
7. Meningococcal disease.....	(1)32
8. Mumps.....	(1)37
9. Pertussis.....	(1)40
10. Pneumococcal disease.....	(1)43
11. Poliomyelitis.....	(1)48
12. Rotavirus gastroenteritis.....	(1)51
13. Rubella and congenital rubella syndrome.....	(1)56
14. Seasonal influenza.....	(1)60
15. Tetanus.....	(1)64
16. Tuberculosis.....	(1)69
17. Yellow fever.....	(1)73
18. Opportunities for integration of services: EPI Plus and vitamin A deficiency.....	(1)77
19. The integrated Global Action Plan for Pneumonia and Diarrhoea.....	(1)80

Module 2: The vaccine cold chain

1. The cold chain.....	(2)3
2. Health facility cold chain equipment.....	(2)7
3. Temperature monitoring devices.....	(2)15
4. Monitoring cold chain temperatures.....	(2)23
5. Arranging vaccines inside cold chain equipment.....	(2)27
6. Basic maintenance of cold chain equipment.....	(2)39
7. The Shake Test.....	(2)44

Module 3: Ensuring safe injections

1. Using safe injection equipment and techniques.....	(3)3
2. Preventing needle-stick injuries.....	(3)10
3. Disposing of used syringes and needles.....	(3)13
Annex 3.1 Unsafe immunization practices.....	(3)22

Module 4: Microplanning for reaching every community

1. Making or updating a map	(4)3
2. Identifying priority health centres and communities	(4)7
3. Identifying barriers to access and utilization	(4)11
4. Identifying solutions and preparing a workplan	(4)14
5. Making a session plan	(4)17
6. Finding defaulters	(4)23
Annex 4.1 Calculations used in determining needed session frequency	(4)24

Module 5: Managing an immunization session

1. Preparing for the session	(5)3
2. Communicating with caregivers	(5)9
3. Assessing infants for vaccination	(5)14
4. Giving vaccinations	(5)17
5. Closing the session	(5)30
6. Recording data	(5)32
7. Using the immunization session checklist	(5)34

Module 6: Monitoring and surveillance

1. Tools for monitoring	(6)3
2. Tools for surveillance	(6)15
3. Monthly summary reports	(6)25
4. Analysis of monitoring data	(6)31
5. Analysis of surveillance data	(6)38
Annex 6.1 Common problems associated with poor access and utilization, and possible solutions	(6)43
Annex 6.2 Immunization service supervisory visit checklist	(6)45

Module 7: Partnering with communities

1. Introduction	(7)3
2. Get started	(7)5
3. Learn about the community	(7)6
4. Plan services with communities	(7)9
5. Involve communities in monitoring and surveillance	(7)12
6. Inform and engage community members	(7)15
7. Address resistant groups	(7)18
Annex 7.1 Community meetings	(7)21
Annex 7.2 Checklist for NGO involvement in immunization	(7)24

Abbreviations and acronyms

AD	Auto-disable (syringes or prefilled injection devices)
AEFI	Adverse Event Following Immunization
AIDS	Acquired immune-deficiency syndrome
BCG	Bacille Calmette-Guérin vaccine that protects against tuberculosis
CRS	Congenital rubella syndrome
CTC	Controlled temperature chain
DOTS	Directly observed treatment schedule for tuberculosis
dT	Diphtheria-tetanus toxoids vaccine with lower concentration of diphtheria toxoid
DT	Diphtheria-tetanus toxoids vaccine
DTP	A combination vaccine containing diphtheria, tetanus toxoid, and pertussis vaccines
DTP+HepB	A combination vaccine containing DTP and hepatitis B vaccines
DTP+HepB+Hib	A combination vaccine containing DTP, HepB and <i>Haemophilus influenzae</i> type b vaccines
DTR	Electronic temperature logger
EPI	Expanded Programme on Immunization
GAPPD	Integrated Global Action Plan for Pneumonia and Diarrhoea
HC	Health centre
HepB	Hepatitis B
Hib	<i>Haemophilus influenzae</i> type b
HIV	Human immunodeficiency virus
HPV	Human papillomavirus
ID	Intradermal
ILR	Ice-lined refrigerators
IM	Intramuscular
IPV	Inactivated polio vaccine
IU	International unit (unit in vitamin A supplements)
JE	Japanese encephalitis
M	Measles only vaccine
MCV	Measles-containing vaccine
Men (as in MenA)	Meningitis
MM	A combination vaccine containing measles and mumps vaccines
MMR	A combination vaccine containing measles, mumps, and rubella vaccines
MMRV	A combination vaccine containing measles, mumps, rubella and varicella vaccines
MNT	Maternal and neonatal tetanus
MR	A combination vaccine containing measles and rubella vaccines
NGO	Nongovernmental organization
NIDs	National Immunization Days (for polio eradication)
OPV	Oral polio vaccine

ORS	Oral rehydration solution
PAB	Protected at birth
PATH	Program for Appropriate Technology in Health
PCV	Pneumococcal conjugate vaccines
RUP	Reuse prevention feature
RV	Rotavirus vaccine
SC	Subcutaneous
TB	Tuberculosis
Td	Tetanus-diphtheria toxoids vaccine
TT	Tetanus toxoid vaccine
TTCV	Tetanus toxoid-containing vaccine
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
USA	United States of America
VAD	Vitamin A deficiency
VAPP	Vaccine associated paralytic polio
VVM	Vaccine vial monitor
WHO	World Health Organization
WPV	Wild polioviruses
YF	Yellow fever



Acknowledgements

This revised edition of Immunization in Practice is the result of team work between WHO and other GAVI alliance partners, particularly UNICEF, CDC, Program for Appropriate Technologies in Health (PATH) and John Snow Incorporated (JSI), and many other individuals who are committed to improving immunization services throughout the world. We are especially grateful to JSI for their support in the development of Module 7 and PATH for their support to Module 2.

Ms Jhilmil Bahl coordinated the development of this publication for WHO headquarters, along with several staff working in headquarters and regional offices in the immunization team.

We would like to thank Dr Amulya Reddy who worked as a consultant on this project providing technical support and oversight. We are thankful to Ms Marg Estcourt who provided insights particularly on Module 5.

The authors would like to express their sincere thanks to all the many people who have contributed to the development of this publication.

Preface

With the previous edition of Immunization in Practice (IIP) having been translated and used throughout the world, we realized the tremendous responsibility we had when we embarked on this new version. This new edition has seven modules instead of eight as we concluded that merging target diseases and vaccines would make the flow more useful for our readers. Several new vaccines that have become more readily available and used in recent years have been added. Also the section on integration with other health interventions has been expanded as exciting opportunities and experiences have become evident in the years following the previous edition.

There were also some fundamental issues to resolve. The first was to decide whether IIP should be a training document and therefore written in a teaching style, or remain a practical and resource information guide. The decision was that it should, as before, remain as a book to turn to for information rather than one to be used for training purposes. Nonetheless it is very suitable as a resource during immunization workshops.

The second issue was defining the target audience. IIP is obviously meant to be used by people at the health service delivery level and it needs therefore to be as practical as possible. Being aware, however, that the book is also used at almost every level, we decided that the target audience would be “health facility and sub-national level”, that is for those at the grassroots and the next level up. In reality there is a lot of overlap between the functions of these two levels, so it has not always been necessary to present material differently.

The third issue was to decide what to leave out. We have not tried to include every vaccine available today, only the ones in common use, nor have we provided technical material on supplementary immunization strategies as these are dealt with elsewhere.

The revision of IIP was intended to meet the demand to improve immunization services so as to reach more infants in a sustainable way, building upon the experiences of polio eradication. We have thus included material adapted from polio on planning,

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_27418

