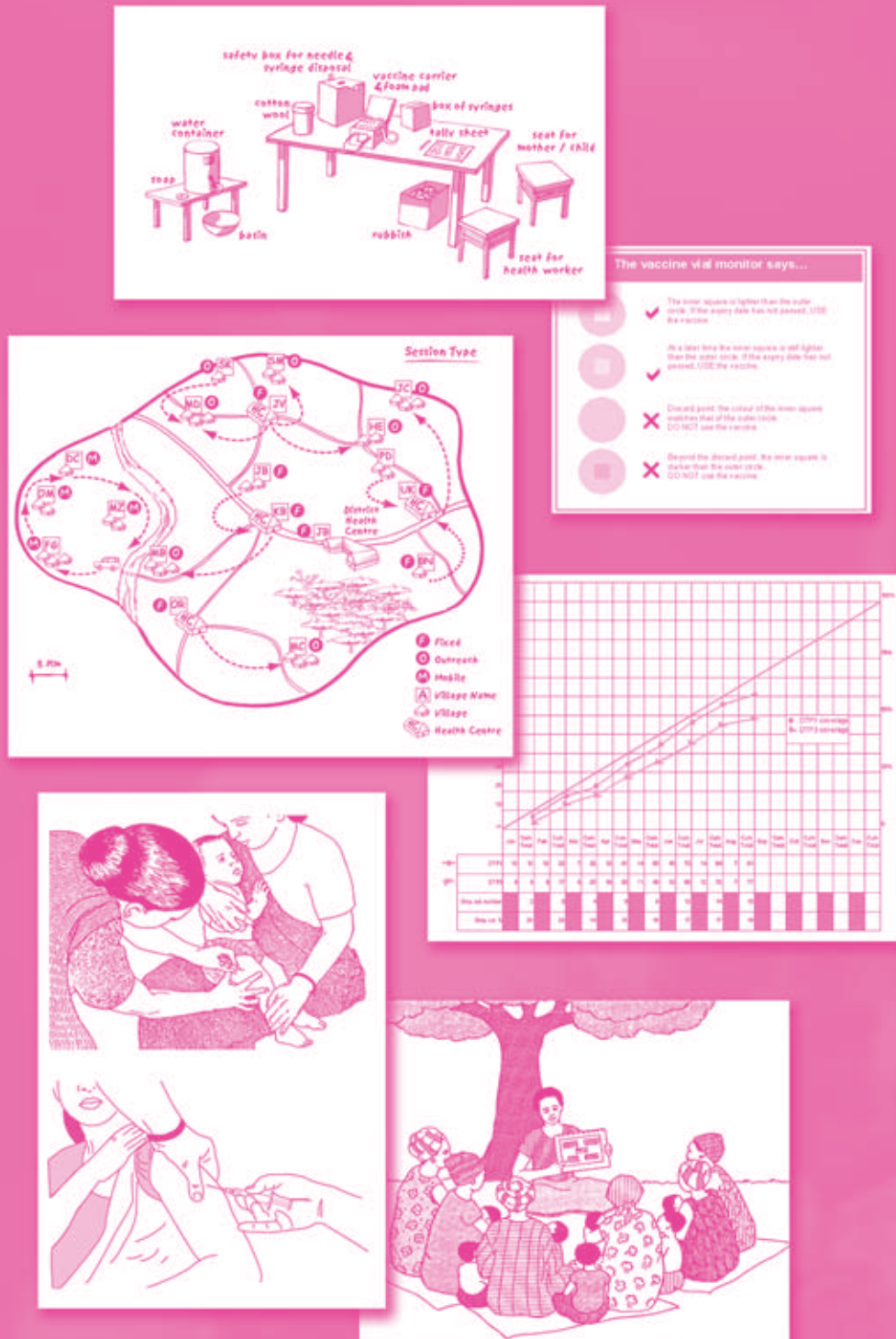


# Training for mid-level managers (MLM)

## 7. The EPI coverage survey



*Plan the survey*

*Conduct the survey*

*Tabulate data*

*Analyse data*

*Take action*



Training for mid-level managers (MLM)

Module 7 : The EPI coverage survey

Training for mid-level managers (MLM). Module 7: the EPI coverage survey

ISBN 978-92-4-001575-3 (electronic version)

ISBN 978-92-4-001576-0 (print version)

This publication was originally published under WHO reference number WHO/IVB/08.07.

© **World Health Organization 2008, republished 2020 under the [CC BY-NC-SA 3.0 IGO](#) licence**

Some rights reserved. This work is available under the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 IGO licence (CC BY-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 (<http://www.wipo.int/amc/en/mediation/rules/>).

**Suggested citation.** Training for mid-level managers (MLM). Module 7: the EPI coverage survey. Geneva: World Health Organization; 2008, republished 2020 under the licence: [CC 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.

# Introduction to the series

This new series of modules on immunization training for mid-level managers replaces the version published in 1991. As there have been many changes in immunization since that time, these modules have been designed to provide immunization managers with up-to-date technical information and explain how to recognize management and technical problems and to take corrective action and how to make the best use of resources.

More and more new, life-saving vaccines are becoming available, yet the introduction of a new vaccine does not necessarily require a separate plan and separate training. This new series for mid-level managers integrates training for new vaccine introduction into each subject addressed by the modules. In this way, introduction of new vaccines is put into its day-to-day context as part of the comprehensive range of activities required to improve immunization systems.

In the context of these modules, mid-level managers are assumed to work in secondary administrative levels, such as a province; however, the modules can also be used at national level. For district managers (third administrative level), a publication on 'immunization in practice'<sup>1</sup> is widely available. As it contains a large amount of technical detail, it is also recommended for mid-level managers courses.

In writing these modules, the authors tried to include essential topics for mid-level managers, while keeping the modules brief and easy to use. They are intended to complement other published materials and guidelines, some of which are referred to in the text. Many more documents are available on the CD-ROM which accompanies this series. Each module is organized in a series of steps, in which technical information is followed by learning activities. Some knowledge and experience are needed to complete the learning activities, but even new readers should be imaginative and constructive in making responses. Facilitators should also be aware that the responses depend on the national context. Thus, there are no absolutely right or wrong answers, and the series does not set down new 'policies' or 'rules'. The authors hope that the readers of these modules will find them informative, easy to read and an enjoyable learning experience.

## Modules in the mid-level managers series

Module 1 : Cold chain, vaccines and safe-injection equipment management

Module 2: Partnering with communities

Module 3: Immunization safety

Module 4: Supportive supervision

Module 5: Monitoring the immunization system

Module 6: Making a comprehensive annual national immunization plan and budget

Module 7: The EPI coverage survey

Module 8: Making disease surveillance work

<sup>1</sup> *Immunization in practice: A practical guide for health staff*. Geneva, World Health Organization, 2004

---

## Acknowledgements

This new series of modules on immunization training for mid-level managers is the result of team work between a large number of partners including the Centers for Disease Control and Prevention (CDC), IMMUNIZATIONbasics, Program for Appropriate Technology in Health (PATH), United Nations Children's Fund (UNICEF), United States Agency for International Development (USAID) and the World Health Organization (WHO). The authors are especially grateful to the consultants from the University of South Australia who have made a major contribution to the development of the modules.

# Contents

<b>Introduction to the series</b>	<b>I</b>
Modules in the mid-level managers series	I
<b>Acknowledgements</b>	<b>II</b>
<b>Abbreviations and Acronyms</b>	<b>IV</b>
<b>Definitions of Terms</b>	<b>IV</b>
<b>Introduction to Module 7</b>	<b>1</b>
Different ways of calculating coverage	2
What is new in this revision?	3
Some history	4
Learning objectives	5
Flowchart	5
<b>1. Plan the survey</b>	<b>6</b>
1.1 Planning based on national immunization schedule	6
1.2 Select the age group of children to be evaluated	7
1.3 Decide which sources of information to use	7
1.4 Decide how many interviewers are needed and the length of the survey	8
1.5 Identify clusters	9
<b>2. Conduct the survey</b>	<b>16</b>
2.1 Select the starting household	16
2.2 Select subsequent houses	18
2.3 Complete the cluster forms	20
2.4 Implement a control system on data collection	27
<b>3. Tabulate data</b>	<b>34</b>
3.1 Complete the cluster forms	34
3.2 Complete the summary forms	42
<b>4. Analyse data</b>	<b>52</b>
4.1 Evaluate infant immunization	52
4.2 Evaluate the reasons for immunization failure	55
4.3 Evaluate TT immunization of women	57
<b>5. Take action</b>	<b>60</b>
<b>Annex A: How to use a random number table</b>	<b>62</b>
<b>Annex B: Immunization coverage: results of an EPI coverage survey</b>	<b>64</b>
<b>Annex C: Immunization coverage survey forms: Infant Immunization</b>	<b>66</b>
<b>Annex D: Calculating confidence intervals</b>	<b>78</b>
<b>Annex E: Other types of surveys</b>	<b>80</b>

## Abbreviations and Acronyms

ANC	antenatal care
BCG	bacille Calmette-Guérin (vaccine)
CDC	Centers for Disease Control and Prevention
DHS	Demographic and Health Survey
DTP	diphtheria-tetanus-pertussis vaccine
EPI	Expanded Programme on Immunization
HepB	hepatitis B (vaccine)
IIP	<i>Immunization in practice</i>
JE	Japanese encephalitis
MICS	Multiple Indicator Cluster Survey (UNICEF)
MLM	mid level manager
MMR	Mumps, Measles, Rubella (vaccine)
OPV	oral polio vaccine
PATH	Program for Appropriate Technology in Health
SIA	Supplemental Immunization Activities
TT	tetanus toxoid
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
YF	yellow fever

## Definitions of Terms

**Cluster:** A small group that is part of a population that is being surveyed; for the purposes of evaluating immunization coverage, a cluster is defined as seven or more children in the age range being evaluated.

**Cluster survey:** A special study designed to measure the percentage of individuals in a given age group who are immunized.

**EPI cluster sampling technique:** A survey done in 30 systematically selected clusters of seven or more children to estimate the immunization coverage of all the children that live in the area (i.e. the population) being surveyed.

**Immunization coverage:** Proportion of individuals in the target population who are immunized

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\\_29424](https://www.yunbaogao.cn/report/index/report?reportId=5_29424)

