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Partners for Health Reformplus

# Workbook for District EPI Managers: Monitoring of Immunization Activities and Use of Vaccines in Yemen

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*First Edition, March 2005*

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Prepared by:

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Ministry of Public Health and  
Population of Yemen

*With technical support provided by:*

Partners for Health Reformplus  
WHO/Yemen



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*In collaboration with:*

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*Order No TK 016*





## **Mission**

*Partners for Health Reformplus is USAID's flagship project for health policy and health system strengthening in developing and transitional countries. The five-year project (2000-2005) builds on the predecessor Partnerships for Health Reform Project, continuing PHR's focus on health policy, financing, and organization, with new emphasis on community participation, infectious disease surveillance, and information systems that support the management and delivery of appropriate health services. PHRplus will focus on the following results:*

- ▲ *Implementation of appropriate health system reform.*
- ▲ *Generation of new financing for health care, as well as more effective use of existing funds.*
- ▲ *Design and implementation of health information systems for disease surveillance.*
- ▲ *Delivery of quality services by health workers.*
- ▲ *Availability and appropriate use of health commodities.*

## **March 2005**

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**Submitted to:** USAID/Sana'a

and:

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Health Systems Division  
Office of Health, Infectious Disease and Nutrition  
Center for Population, Health and Nutrition  
Bureau for Global Programs, Field Support and Research  
United States Agency for International Development



# Abstract

This workbook accompanies *Guidelines for Safe Immunization Practices and Monitoring of Immunization Programs at District and Facility Levels in Yemen*. It is a tool designed primarily for personnel of district-level EPI (Expanded Programme on Immunization) offices to help them monitor and evaluate immunization work, use of vaccine and adequacy of cold chain on their services territory. It helps EPI managers to establish the link between information systems' data and response, as well as to document the data analysis and utilization for management purposes.

The current version of the workbook has been developed for piloting in the Amran Governorate in 2005. Based on pilot experiences, it will be revised for use nationwide.

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# Acronyms

<b>AD</b>	Auto-disable/auto-destruct (syringes)
<b>AFP</b>	Acute Flaccid Paralysis
<b>BCG</b>	Bacille Calmette-Guerin Vaccine
<b>DG</b>	Director General
<b>DPT</b>	Diphtheria, Pertussis and Tetanus Vaccine
<b>EPI</b>	Expanded Programme on Immunization
<b>GIS</b>	Geographic Information Systems
<b>HepB</b>	Hepatitis B Vaccine
<b>Hib</b>	Hemophilus influenza Type B Vaccine
<b>HIS</b>	Health Information Systems
<b>HIV/AIDS</b>	Human Immunodeficiency Virus/ Acquired Immunodeficiency Syndrome
<b>IV</b>	Intravenous
<b>MoPH&amp;P</b>	Ministry of Public Health and Population
<b>OPV</b>	Oral Poliovirus Vaccine
<b>Penta-3</b>	Third Dose of Pentavalent Vaccine
<b>PHR<i>plus</i></b>	Partners for Health Reform <i>plus</i> Project
<b>TT(2+)</b>	Tetanus Toxoid (at least two doses)
<b>UNICEF</b>	United Nations Children's Fund
<b>USAID</b>	United States Agency for International Development
<b>VVM</b>	Vaccine Vial Monitors
<b>WCBA</b>	Women of Childbearing Age
<b>WHO</b>	World Health Organization



# Contributors

This manual has been prepared by the Ministry of Public Health and Population (MoPH&P) expanded working group headed by Dr. Gamal Abdual-Sattar, General Manager for the Expanded Program on Immunization (EPI), and co-chaired by Dr. Mohammed Ibrahim, PHR*plus* Project Coordinator and the Coordinator of the Neonatal Tetanus Elimination in Yemen, with technical assistance from USAID/PHR*plus*.

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# Acknowledgments

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# 1. Introduction

This workbook is a job aide accompanying the first edition of *Guidelines for Safe Immunization Practices and Monitoring of Immunization Programs at District and Facility Levels in Yemen*. It consists of self-explanatory worksheets, tables, and graphs to assist district-level EPI managers to better record, process, analyze, and utilize management of information systems' (MIS) data. It provides a detailed template in which critical data on population, vaccinations, immunization barriers, vaccine flow, use and balances, and cold chain equipment are recorded in a standardized format, typically on a monthly or quarterly basis. The workbook contains multiple copies of several forms, with the intention that there be a form for each of the antigens or months of the year. It is recommended that the worksheets, tables, and graphs within the job aide be completed for all critical immunization data in the district.





## 2. Worksheets and Tables





## Summary Report on Immunization Performance

Yemen Rep.  
MoPH & P  
PHC Section  
G.D. for Family Health  
EPI Programme

Form D-1

Governorate:  
Month:

District:  
Year:

No.	Health Facility Name	Cold chain problem?	Vaccinator N/A?	Targets			OPV						Pentavalent						Penta-3 given to home catchment area children under 1	Measles			Vit A		Tetanus Toxoid											
							BCG	0		1		2		3		1	2			3		1	2	3	1		2		1		2		3		4	
				HD	OD	<1y		>1y	<1y	>1y	<1y	>1y	HD	OD	<1y		>1y	HD		OD	<1y				>1y	HD	OD	PW	Non-PW	HD	OD	PW	Non-PW	HD	OD	PW
				<1y	PW	CBAW	HD	OD	HD	OD	HD	OD	>1y	HD	OD	>1y	HD	OD		>1y	HD	OD	HD	OD	Non-PW	HD	OD	Non-PW	HD	OD	Non-PW	HD	OD	Non-PW	HD	OD
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<b>Total</b>																																				
				BCG		OPV						Pentavalent						Measles			Vit A		TT			Syringes			Safety Boxes	Imm. Cards						
				0	1	2	3	1	2	3	1	2	3	<1y	>1y	>1y	100,000 IU	200,000 IU		IM	SC	Mix		Children	Women											
Total immunizations given				0																																
Beginning balance in the district store				1																																
Received during the report month				2																																
Issued to facilities				3																																
Destroyed/written off				4																																
Ending balance at the district store				5=1+2-3-4																																
Ending balance in facilities				6																																
TOTAL amount used in facilities				7																																

District Supervisor:  
Signature:

HD-home district; OD-other districts  
PW-pregnant women; non-PW-non pregnant women





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							BCG	0	1		2		3		1	2		3		1	2	<1y	>1y	>1y	1		2		3		4		5					
				HD	OD	<1y			>1y	HD	OD	<1y	>1y	HD		OD	<1y	>1y							PW	Non-PW	PW	Non-PW	PW	Non-PW	PW	Non-PW	PW	Non-PW				
				<1y	PW	CBAW	HD	OD	HD	OD	HD	OD	>1y	HD	OD	>1y	HD	OD		>1y	HD	OD	HD	OD	Non-PW	HD	OD	Non-PW	HD	OD	Non-PW	HD	OD	Non-PW	HD	OD	Non-PW	
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Total							BCG	OPV						Pentavalent						Measles	Vit A		TT	Syringes			Safety Boxes	Imm. Cards	
<1y	PW	CBAW	HD	OD	HD	OD		HD	OD	HD	OD	HD	OD	HD	OD	HD	OD	<1y	>1y		100,000 IU	200,000 IU		IM	SC	Mix		Children	Women
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			<1y	PW	CBAW		HD	OD	<1y	>1y	HD	OD	<1y	>1y	HD	OD	<1y			>1y	HD	OD	<1y	>1y	HD	OD	PW	Non-PW	HD	OD	Non-PW	HD	OD	Non-PW	HD	OD	Non-PW	HD	OD
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								HD	OD		<1y	>1y		HD	OD			<1y	>1y									HD	OD	<1y	>1y	HD	OD	HD	OD	Non-PW	HD	OD	Non-PW	HD	OD	Non-PW	HD	OD	Non-PW	HD	OD	Non-PW	
			<1y	PW	CBAW	HD	OD	HD	OD	HD	OD	HD	OD	HD	OD	HD	OD	HD	OD	HD		OD	HD	OD	HD	OD	HD	OD	HD	OD	HD	OD	HD	OD	HD	OD	HD	OD	HD	OD	HD	OD							
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**WORKSHEET ON IMMUNIZATION COVERAGE OF pregnant women with TT 2+**

in \_\_\_\_\_ district \_\_\_\_\_ (year)

Form D-2.2

Target - no. of pregnant women in the district	No. of TT 2-5 vaccinations given to pregnant women in the home district																													
	Jan					Feb					Mar					Apr					May					Jun				
	TT2	TT3	TT4	TT5	TOT	TT2	TT3	TT4	TT5	TOT	TT2	TT3	TT4	TT5	TOT	TT2	TT3	TT4	TT5	TOT	TT2	TT3	TT4	TT5	TOT	TT2	TT3	TT4	TT5	TOT
<b>TOTAL in the district</b>																														
<b>Cumulative TOTAL</b>																														
<b>Cumulative %</b>																														
	Jul					Aug					Sep					Oct					Nov					Dec				
	TT2	TT3	TT4	TT5	TOT	TT2	TT3	TT4	TT5	TOT	TT2	TT3	TT4	TT5	TOT	TT2	TT3	TT4	TT5	TOT	TT2	TT3	TT4	TT5	TOT	TT2	TT3	TT4	TT5	TOT
<b>TOTAL in the district</b>																														
<b>Cumulative TOTAL</b>																														
<b>Cumulative %</b>																														





























## COLD CHAIN EQUIPMENT INVENTORY BOOK

Form D-6

at all immunization points of \_\_\_\_\_ district as of \_\_\_\_\_ (date)

# Health facility name	REFRIGERATOR(s) *			FREEZER(s)			COLD BOX(es)			VACCINE CARRIERS			Remarks
	Model	Volume** (l)	QTY broken	Model	Volume** (l)	QTY broken	Model	Volume** (l)	QTY broken	Model	Volume** (l)	QTY broken	
<b>TOTAL</b>													

\* among them refrigerators with freezers  
 \*\* inner volume of the equipment is considered





**District** **Year** **IMMUNIZATION COVERAGE (%) OF CHILDREN UNDER 1Y with Pentavalent-3 vaccine**

4 quarters	100%																			
3 quarters	75%																			
2 quarters	50%																			
1 quarter	25%																			
	0%																			
Cumulative coverage, %																				
4 quarters																				
3 quarters																				
2 quarters																				
1 quarter																				
Health facility (name)																				<b>TOTAL</b>

Cumulative quarterly coverage (%) is used for building the diagram (see appropriate worksheet)