MESSAGE

Two monumental public health milestones have been achieved recently with India completing five years of being Polio free and the WHO certification of India having eliminated Maternal and Neonatal Tetanus. I commend the hard work and commitment of medical officers and all health workers on achieving these commendable milestones.

The Universal Immunization Program has grown from strength to strength over the years and has also responded to the public health challenges across the country. With an attempt to bridge the gap in immunization, Mission Indradhanush has made tremendous gains towards this goal. This special countrywide initiative has been successful mainly due the unstinted support and active involvement of the state governments, health staff at all levels, partner agencies and other stakeholders.

While Mission Indradhanush has resulted in immediate gains, it is imperative that the routine immunization planning and delivery mechanism are also strengthened. This will build up sustainable capacity to ensure that every single pregnant woman and child are immunized, thus preventing the avoidable loss of precious lives and the burden of health care costs.

The Immunization Handbook 2016 will provide guidance to the officers in the field and prove to be a source of reference to support their efforts to provide quality immunization services. I congratulate the Immunization Division of the Ministry of Health and Family Welfare and the partner agencies who have contributed to bringing out this important document.
Routine Immunization (RI) is a nation’s strategic investment in its future. India’s routine immunization program is dynamic and over the years has evolved to address the changing public health needs of the county. Tremendous gains have been made in immunization coverage in a country where challenges reflect accessibility, acceptability and availability issues. The medical officers and health workers of the health system delivering the RI program continue to be the backbone and strength in preventing morbidity and mortality from Vaccine Preventable Diseases (VPDs).

Since the printing of the last edition of the RI medical officers handbook, India and South East Asia have been certified Polio-Free and India has achieved the certification of having eliminated Maternal and Neonatal Tetanus. Both these achievements are the direct result of the RI program and attributed to the hard work and commitment of the frontline health workers, medical officers and program managers at all levels.

The Government of India continues to encourage and support all endeavors to strengthen and improve the capacity of the health workers to help them improve the quality of their work. The RI medical officer’s handbook has been the guiding force providing the necessary knowledge and skills for the medical officers to be effective leaders of the immunization program.

With the introduction of newer vaccines, this revised Immunization handbook will play a critical role in the coming years. Its renewed focus on microplanning will provide the platform necessary to build a stronger base for ensuring immunization of all beneficiaries and prevent needless mortality and morbidity due to VPDs.
PREFACE

It gives me immense pleasure to present the revised Immunization Handbook for Medical Officers, 2016. This unique handbook has been the mainstay for Immunization-specific training of medical officers since 2006 and continues to contribute to improving the capacity of medical officers to lead their teams in increasing the reach and quality of the routine immunization program in the country.

Improving equity and quality of service is a goal that is achievable by using techniques to strengthen systems, build capacity of health staff and ensure the confidence of the community in the services provided.

While the existing infrastructure of manpower and material continues to be effective, it is necessary to focus on enhanced efficiency through systematic development of micro plans and management of immunization services. Towards this aim, the unit on microplanning has been enhanced with a detailed description of the process and formats needed for developing and maintaining high quality RI microplans and beneficiary due lists. The unit on high risk populations and urban areas defines such areas as well as describes area demarcation and identification of vulnerable populations with the objective of ensuring that beneficiaries in such areas are less likely to be missed. This will make medical officers and health workers to bring about equity of services.

The units on cold chain, supervision and monitoring, and use of data will improve the capacity of medical officers to interpret data, better manage storage and handling of vaccines, and provide supportive supervision to health staff at the field level. As team leaders, medical officers will benefit from the unit on capacity building which provides agendas as well as the key messages to be disseminated during trainings and review meetings. This will contribute to enhancing knowledge and skill of frontline health workers, which in turn will improve the quality of services.

The success of the routine immunization program is also influenced by the confidence the community holds in the services. Safety of injections administered as well as safety of health staff is detailed
in the unit on safe injections and waste management which will help to build staff and community confidence. The unit on communication for behavior change focuses on how to strategically use information as well as innovative methods to tackle vaccine hesitancy and bring in community support for the program.

Surveillance for Vaccine Preventable Diseases (VPD) and Adverse Events Following Immunization (AEFI) are critical to the immunization program as timely investigation will provide information for program managers and field staff to address community concerns. The units on VPDs and AEFI are aimed to sensitize readers to the importance of timely reporting with reference to the operational guidelines.

With the introduction of newer vaccines such as Inactivated Polio Vaccine (IPV), Rotavirus vaccine and Pneumococcal vaccine (PCV), it is an opportune time to regularly review immunization services in order to identify gaps and determine local actions necessary to address them. These activities will ensure rational use of manpower and logistics thus strengthening systems and reducing avoidable wastage of valuable vaccines.

I am confident that this edition of the Handbook will continue to be an effective guide for immunization training and a reference book for medical officers to address immunization issues in the field. I commend the efforts of all those who have contributed to making this a much valuable document.

(Dr. Rakesh Kumar)
Message from Deputy Commissioner (Immunization)

With the success of Small Pox eradication, the Immunization programme was implemented in a more organized manner as Expanded Programme of Immunization (EPI) in 1978 targeting under 5 year children only in urban areas. In 1985 Immunization programme expanded as Universal Immunization Programme (UIP) with focus for under 1 year children, expansion of cold chain etc. The program reached every corner of the country in 1990 and now the program has become an integral part of India’s public health infrastructure.

The last five years has seen a dramatic change in the landscape of routine immunization with new vaccines being introduced, the vaccination schedule for Measles and JE changed to 2 dose schedule, open vial policy implemented, strengthening of AEFI system etc. Implementation has been strengthened with capacity building of personnel as well as improvements in service delivery.

One of the key instruments for building capacity of medical officers has been the “Immunization handbook” which provides essential information, guidelines and exercises for skill development of medical officers.

The 3rd edition has grown in both size and content. This edition has been redesigned to serve two purposes, the first as the backbone for the three day MO immunization training and second as a reference for immunization in the field. All the information has been updated to reflect recent changes in policy and guidelines.

The Unit on microplanning has been rewritten to explain the step by step process of microplan development. This Unit includes GoI recommended RI formats at all levels from planning, head-counting and session due-listing at the sub-centre to consolidated formats for the PHC to give an overview of critical RI information on a single sheet. Efforts have been made to explain “how” each step is to be taken rather than what steps to take. Each format has its SOP sheet which explains each variable and how it is to be collected.

Three new Units have been included to cover capacity building, high-risk & urban areas and financial management. These critical areas have been included in response to the changing dynamics in demography, manpower and needs of the program.

References and links have been carefully selected from Government and WHO sites to enable the medical officers to access relevant guidelines and information needed to strengthen existing processes and improve outcomes.

I am certain that medical officers and the program will benefit from this edition of the immunization handbook.

(Dr. Pradeep Haldar)
# Table of Contents

<table>
<thead>
<tr>
<th>UNIT</th>
<th>TOPIC</th>
<th>PAGE NO</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Message</td>
<td>iii</td>
</tr>
<tr>
<td></td>
<td>Foreword</td>
<td>iv</td>
</tr>
<tr>
<td></td>
<td>Preface</td>
<td>v</td>
</tr>
<tr>
<td></td>
<td>Message from DC (IMM)</td>
<td>vi</td>
</tr>
<tr>
<td></td>
<td>Acknowledgements</td>
<td>xi</td>
</tr>
<tr>
<td></td>
<td>Acronyms</td>
<td>xiii</td>
</tr>
<tr>
<td>Unit-1</td>
<td>Introduction to immunization and role of medical officers in immunization</td>
<td>1</td>
</tr>
<tr>
<td>Unit-2</td>
<td>National Immunization Schedule</td>
<td>17</td>
</tr>
<tr>
<td>Unit-3</td>
<td>Routine Immunization Microplanning</td>
<td>21</td>
</tr>
<tr>
<td>Unit-4</td>
<td>Cold chain and logistics management</td>
<td>83</td>
</tr>
<tr>
<td>Unit-5</td>
<td>Safe injections and Waste Disposal</td>
<td>133</td>
</tr>
<tr>
<td>Unit-6</td>
<td>Adverse events following immunization</td>
<td>145</td>
</tr>
<tr>
<td>Unit-7</td>
<td>Sources and use of data</td>
<td>169</td>
</tr>
<tr>
<td>Unit-8</td>
<td>Supervision and monitoring</td>
<td>179</td>
</tr>
<tr>
<td>Unit-9</td>
<td>Communication for behaviour change</td>
<td>197</td>
</tr>
<tr>
<td>Unit-10</td>
<td>Vaccine Preventable Diseases and VPD surveillance</td>
<td>221</td>
</tr>
<tr>
<td>Unit-11</td>
<td>Capacity building of health functionaries in immunization</td>
<td>229</td>
</tr>
<tr>
<td>Unit-12</td>
<td>High risk populations and Urban areas</td>
<td>247</td>
</tr>
<tr>
<td>Unit-13</td>
<td>Financial planning in Immunization</td>
<td>257</td>
</tr>
<tr>
<td></td>
<td>References and links</td>
<td>273</td>
</tr>
<tr>
<td></td>
<td>Frequently asked questions</td>
<td>279</td>
</tr>
</tbody>
</table>
Acknowledgements

Compiled and Edited by:

Dr. M K Aggarwal, MoHFW
Dr. Leonard Machado, WHO India

Advisors:

Dr. Pradeep Haldar, MoHFW
Dr. Pankaj Bhatnagar, WHO India

List of Contributors:

Mr. Abhimanyu Saxena, UNDP
Dr. Bhawani Shankar Tripathy, UNICEF
Dr. Bhupendra Tripathi, BMGF
Dr. Leonard Machado, WHO India
Dr. Mainak Chatterjee, NCCVMRC, NIHFW
Mr. Nithiyananthan Muthusamy, ITSU
Ms. Monica Chaturvedi, ITSU
Mr. Paritosh Kumar P, NCCVMRC, NIHFW
Dr. Pradeep Haldar, MoHFW
Dr. Sheenu Chaudhary, ITSU
Dr. Sudhir Joshi, WHO India
Dr. Sujeet Jain, WHO India

Recognizing the suggestions and contributions of Dr. Renu Paruthi author of the 1st Edition of the MO Handbook.

Support in reviewing the manuscript:

BMGF: Dr. Gunjan Taneja
ITSU: Dr. Ajit B, Dr. Arup Debroy, Dr. Deepak Polpakara.
JSI: Dr. Bhrigu Kapuria
MoHFW: Dr. Manjari, ITSU & Dr. Priti Chaudhary, WHO India
UNICEF: Dr. Srihari Dutta, Dr. Satish Gupta, Dr. Gajendra Singh
WHO India: Dr. Balwinder Singh, Dr. Bindu Kalshan, Dr. Danish Ahmed, Dr. Lucky Sangal, Dr. Mohammad Ahmad, Dr. Mohammad Samiuddin, Dr. Sachin Rewaria, Dr. Sataybrata Routray.
# Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AD</td>
<td>Auto-Disable</td>
</tr>
<tr>
<td>AEFI</td>
<td>Adverse Event Following Immunization</td>
</tr>
<tr>
<td>AES</td>
<td>Acute Encephalitis Syndrome</td>
</tr>
<tr>
<td>AFP</td>
<td>Acute Flaccid Paralysis</td>
</tr>
<tr>
<td>AHS</td>
<td>Annual Health Survey</td>
</tr>
<tr>
<td>ANM</td>
<td>Auxiliary Nurse Midwife</td>
</tr>
<tr>
<td>ANMTC</td>
<td>ANM Training Centre</td>
</tr>
<tr>
<td>ASHA</td>
<td>Accredited Social Health Activist</td>
</tr>
<tr>
<td>AVD</td>
<td>Alternate Vaccine Delivery</td>
</tr>
<tr>
<td>AWC</td>
<td>Anganwadi Centre</td>
</tr>
<tr>
<td>AWW</td>
<td>Anganwadi Worker</td>
</tr>
<tr>
<td>BCC</td>
<td>Behaviour Change Communication</td>
</tr>
<tr>
<td>BCG</td>
<td>Bacillus Calmette-Guerin</td>
</tr>
<tr>
<td>BDO</td>
<td>Block Development Officer</td>
</tr>
<tr>
<td>BEE</td>
<td>Block Extension Educator</td>
</tr>
<tr>
<td>BMO</td>
<td>Block Medical Officer</td>
</tr>
<tr>
<td>CBHI</td>
<td>Central Bureau Of Health Intelligence</td>
</tr>
<tr>
<td>CBO</td>
<td>Community-Based Organization</td>
</tr>
<tr>
<td>CBWTF</td>
<td>Common Biomedical Waste Treatment Facility</td>
</tr>
<tr>
<td>CCT</td>
<td>Cold-Chain Technician</td>
</tr>
<tr>
<td>CDPO</td>
<td>Community Development Project Officer</td>
</tr>
<tr>
<td>CES</td>
<td>Coverage Evaluation Survey</td>
</tr>
<tr>
<td>CHC</td>
<td>Community Health Centre</td>
</tr>
<tr>
<td>CMO</td>
<td>Chief Medical Officer</td>
</tr>
<tr>
<td>CPCB</td>
<td>Central Pollution Control Board</td>
</tr>
<tr>
<td>CPR</td>
<td>Cardiopulmonary Resuscitation</td>
</tr>
<tr>
<td>CSO</td>
<td>Civil Service Organization</td>
</tr>
<tr>
<td>CSSM</td>
<td>Child Survival and Safe Motherhood</td>
</tr>
<tr>
<td>CSU</td>
<td>Central Surveillance Unit</td>
</tr>
<tr>
<td>DF</td>
<td>Deep Freezer</td>
</tr>
<tr>
<td>DGHS</td>
<td>Directorate General Of Health Services</td>
</tr>
<tr>
<td>DIO</td>
<td>District Immunization Officer</td>
</tr>
<tr>
<td>DLHS</td>
<td>District Level Health Survey</td>
</tr>
<tr>
<td>DPT</td>
<td>Diphtheria–Pertussis–Tetanus</td>
</tr>
<tr>
<td>DTFI</td>
<td>District Task Force For Immunization</td>
</tr>
</tbody>
</table>
Dwpt  Diphtheria, whole Cell Pertussis, Tetanus
EC    Executive Committee
ECCVMC Effective Cold Chain Vaccine Management Course
EDD   Expected Date Of Delivery
EEFO  Early Expiry First Out
EPI   Expanded Programme On Immunization
Evin  Electronic Vaccine Intelligence Network
EVM   Effective Vaccine Management
FAQ   Frequently Asked Questions
FIFO  First in First Out
fIPV  Faractional Inactivated Polio Vaccine
FLW   Field Level Worker
FMR   Financial Management Report
GFR   General Financial Rules
GMP   Good Manufacturing Practice
GMSD  Government Medical Store Depot
Goi   Government of India
GVAP  Global Vaccine Action Plan
Hep B Hepatitis B
HHE   Hypotonic, Hyporesponsive Episode
Hib   Haemophilus Influenzae Type B
HMIS  Health Management Information System
HRA   High-Risk Area
HRG   High-Risk Group
HS    Health Supervisor
HW    Health Worker
IAP   Indian Academy Of Paediatrics
ICDS  Integrated Child Development Services
IDSP  Integrated Disease Surveillance Project
IEC   Information, Education And Communication
ILR   Ice-Lined Refrigerator
IM    Intramuscular
IPC   Inter Personal Communication
IPV   Inactivated Polio Vaccine
ISP   Immunization Strengthening Project
ITSU  Immunization Technical Support Unit
IV    Intravenous
JE    Japanese Encephalitis
LAV  Live Attenuated Vaccine
LHV  Lady Health Visitor
LMIS Logistics Management Information System
LMP  Last Menstrual Period
LS Ladies Supervisor (ICDS)
MCH Maternal and Child Health
MCP Mother and Child Protection
MCTS Mother and Child Tracking System
MCUP Measles Catch-Up Programme
MCV Measles Containing Vaccine
MIS Management Information System
MO Medical Officer
Mohfw Ministry Of Health And Family Welfare
MOIC Medical Officer In-Charge
NCC National Cadet Corps
NCCMIS National Cold Chain Management Information System
NCCTC National Cold Chain Training Centre
NCCVMRC National Cold Chain and Vaccine Management Resource Centre
NFHS National Family Health Survey
NGO Non-governmental Organization
NHM National Health Mission
NIHFW National Institute Of Health And Family Welfare
NIS National Immunization Schedule
NPSP National Polio Surveillance Project
NRHM National Rural Health Mission
NSS National Social Service
NTAGI National Technical Advisory Group on Immunization
OPV Oral Polio Vaccine
Penta Pentavalent
PHC Primary Health Centre
PIP Program Implementation Plan
PRI Panchayati Raj Institution
PW Pregnant Woman
RCH Reproductive and Child Health
RI Routine Immunization
RIM Routine Immunization Monitoring
RIMS Routine Immunization Management System
SAGE Strategic Advisory Group of Experts
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBCC</td>
<td>Social and Behavioural Change Communication</td>
</tr>
<tr>
<td>SC</td>
<td>Sub-Centre</td>
</tr>
<tr>
<td>SEPIO</td>
<td>State EPI Officer</td>
</tr>
<tr>
<td>SHG</td>
<td>Self-Help Group</td>
</tr>
<tr>
<td>SMnet</td>
<td>Social Mobilization network</td>
</tr>
<tr>
<td>SMO</td>
<td>Surveillance Medical Officer</td>
</tr>
<tr>
<td>SOP</td>
<td>Standard Operating Procedure</td>
</tr>
<tr>
<td>SRS</td>
<td>Sample Registration System</td>
</tr>
<tr>
<td>SSU</td>
<td>State Surveillance Unit</td>
</tr>
<tr>
<td>STFI</td>
<td>State Task Force For Immunization</td>
</tr>
<tr>
<td>TBA</td>
<td>Trained Birth Attendant</td>
</tr>
<tr>
<td>TOT</td>
<td>Training of Trainers</td>
</tr>
<tr>
<td>RRT</td>
<td>Rapid Response Team</td>
</tr>
<tr>
<td>TSS</td>
<td>Toxic Shock Syndrome</td>
</tr>
<tr>
<td>TT</td>
<td>Tetanus Toxoid</td>
</tr>
<tr>
<td>UHC</td>
<td>Urban Health Centre</td>
</tr>
<tr>
<td>UIP</td>
<td>Universal Immunization Programme</td>
</tr>
<tr>
<td>UT</td>
<td>Union Territory</td>
</tr>
<tr>
<td>VAPP</td>
<td>Vaccine Associated Paralytic Poliomyelitis</td>
</tr>
<tr>
<td>VCCH</td>
<td>Vaccine and Cold Chain Handler</td>
</tr>
<tr>
<td>VCCM</td>
<td>Vaccine and Cold Chain Manager</td>
</tr>
<tr>
<td>VDPV</td>
<td>Vaccine Derived Polio Virus</td>
</tr>
<tr>
<td>VHND</td>
<td>Village Health and Nutrition Day</td>
</tr>
<tr>
<td>VHSC</td>
<td>Village Health and Sanitation Committee</td>
</tr>
<tr>
<td>VPD</td>
<td>Vaccine Preventable Disease</td>
</tr>
<tr>
<td>VVM</td>
<td>Vaccine Vial Monitor</td>
</tr>
<tr>
<td>WCO India</td>
<td>WHO Country Office for India</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
</tr>
<tr>
<td>WIC</td>
<td>Walk-In Cooler</td>
</tr>
<tr>
<td>WIF</td>
<td>Walk-In Freezer</td>
</tr>
<tr>
<td>WMF</td>
<td>Wastage Multiplication Factor</td>
</tr>
<tr>
<td>WPV</td>
<td>Wild Polio Virus</td>
</tr>
</tbody>
</table>
UNIT-1

Introduction to immunization and role of medical officers in immunization
Learning objectives

• Explain the milestones in the immunization programme in India
• Describe the recent initiatives by Government of India (GoI) to strengthen routine immunization (RI)
• List the objectives of the Universal Immunization Programme (UIP)
• List the responsibilities of medical officers (MOs) in routine immunization.

Key Contents

The immunization programme in India - a chronology 2
The immunization program in India - facts and impact 7
Improving routine immunization coverage 8
New vaccine introduction 10
Responsibilities of medical officers in immunization programme management 11
Responsibilities of District Immunization Officers in immunization programme management 14
Introduction including role of medical officers in immunization

One of the greatest impacts on the health of mankind has been the use of vaccines. From as far back as 496 B.C. when the Greek historian Thucydides observed that those who survived smallpox would never get re-infected to 1796 with Edward Jenner’s historic cowpox experiment, vaccination has played a major role in the battle on infectious diseases.

Since their acceptance as a public health intervention, vaccines have been instrumental in bringing about a reduction of morbidity and mortality due to vaccine preventable diseases globally. The eradication of smallpox was not only a global public health victory but also a turning point in public health strategy. The power of vaccines and vaccination was proven and thus began an all-out movement to target more diseases.

Vaccines in Routine Immunization (RI) are one of the most cost-effective health investments a country can make. Over the years various strategies to make vaccines universally available, including to the most hard-to-reach and vulnerable populations have saved countless lives.

The benefits to the individual include not only the prevention of disease and disabilities but also the opportunity for a healthier and a more productive life.

The year 2014 marked 40 years since the launch of the Expanded Programme on Immunization (EPI) in 1974. The 27th World Health Assembly (1974) recommended the use of vaccines to protect against six diseases: tuberculosis, diphtheria, tetanus, pertussis, measles and poliomyelitis. This program was the starting point for a dramatic change in world’s public health strategy.

Today, all countries have national immunization programs, and in most developing countries, children under five years of age are immunized with the standard WHO recommended vaccines that protect against—tuberculosis, diphtheria, tetanus (including neonatal tetanus through immunization of mothers), pertussis, polio, measles, hepatitis B, Haemophilus influenza type b (Hib), Rota Virus and Pneumococcal Vaccines. These vaccines prevent more than 2.5 million child deaths each year.
In May 2012 the 65th World Health Assembly endorsed The Global Vaccine Action Plan (GVAP), which envisages provision of universal access to immunization. The mission goal is to improve health by 2020 and beyond, by extending the full benefits of immunization to all people, regardless of where they are born, who they are, or where they live.

**The immunization programme in India – a chronology**

The first vaccine to be introduced in India was BCG in 1962 as part of the National Tuberculosis Programme. Over the years, various new vaccines have been introduced and many milestones achieved. Table 1.1 gives a chronological listing of some important milestones in India’s immunization programme.

**Table 1.1. Immunization milestones – India**

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1978</td>
<td>Expanded Programme of immunization BCG, DPT, OPV, typhoid (urban areas)</td>
</tr>
<tr>
<td>1983</td>
<td>TT vaccine for pregnant women</td>
</tr>
<tr>
<td>1985</td>
<td>Universal Immunization Programme – measles added, typhoid removed, Focus on children less than 1yr of age</td>
</tr>
<tr>
<td>1990</td>
<td>Vitamin-A supplementation</td>
</tr>
<tr>
<td>1995</td>
<td>Polio National Immunization Days</td>
</tr>
<tr>
<td>1997</td>
<td>VVM introduced on vaccines in UIP</td>
</tr>
<tr>
<td>2002</td>
<td>Hep B introduced as pilot in 33 districts &amp; cities of 10 states</td>
</tr>
</tbody>
</table>
| 2005 | • National Rural Health Mission Launched  
|   | • Auto Disable (AD) Syringes introduced into UIP |
| 2006 | JE vaccine introduced after campaigns in endemic districts |
| 2007-8 | Hep B expanded to all districts in 10 states & schedule revised to 4 doses from 3 doses |
| 2010 | Measles 2nd dose introduced in RI and MCUP (14 states) |
| 2011 | • Hepatitis B universalized and Haemophilus influenza type b introduced as pentavalent in 2 states  
|   | • Open Vial Policy for vaccines in UIP |
| 2013 | • Pentavalent expanded to 9 states  
|   | • Second dose of JE vaccine |
| 2014 | India and South East Asia Region certified POLIO- FREE |
| 2015 | • India validated for Maternal and Neonatal Tetanus elimination  
|   | • Pentavalent expanded to all states  
|   | • IPV Introduced |
| 2016 | • Rotavirus vaccine introduced in 4 states in Phase 1  
|   | • tOPV to bOPV Switch  
|   | • Switch to fractional IPV (Phased)  
|   | • Rotavirus vaccine introduced (Phased launch) |
| 2017 | • MR Vaccine introduced  
|   | • PCV (Phased launch)  
|   | • Use of adrenaline IM by ANM in AEFI |
In 1985 the program was changed to Universal Immunization Programme (UIP) and Measles vaccine was added in the same year.

India’s UIP was given the status of one of the five ‘National Technology Missions’ in 1986 thus bringing it under the purview of the 20 point program of the Prime Minister’s Office. In 1992, UIP and the Safe Motherhood program merged under the umbrella of the Child Survival and Safe Motherhood (CSSM) program. Further in 1997 the program was renamed as the Reproductive and Child Health (RCH) program.

In 2005, along with other programs the UIP became part of the National Rural Health Mission. Below are some of the Initiatives undertaken by the government under NRHM (2005) to strengthen the immunization program:

- introduction of Auto Disable (AD) syringes and hub cutters;
- financial support for alternate vaccine delivery to session sites from the last vaccine storage point;
- mobility support to State and District Immunization Officers and other supervisory staff;
- alternate vaccinators for sessions in urban slums and under-served areas, including vacant SCs;
- mobilization of children and pregnant women by ASHAs;
- preparing microplans for SC, PHC/CHC and district;
- quarterly RI review meetings at state, district and block levels;
- training of HWs, MOs, cold chain and data handlers;
- computer assistants for every district and at state;
- decentralized printing of recording, reporting and monitoring tools (e.g. Immunization cards, monitoring charts, tracking bags, temperature charts);
- injection safety (red and black bags, bleach solution and twin buckets);
- strengthening cold chain maintenance and expansion;
- strengthening vaccine delivery from state to district to the PHC/CHC.

GOI declared the year 2012-13 as the “Year of intensification of routine immunization”. During this phase various strategic actions were initiated towards Health systems improvement such as increased funding for supportive supervision and mobilization of beneficiaries. Regular program reviews were conducted at all levels and Special Immunization weeks were conducted in four rounds. The year also saw the introduction of the web based mother and child tracking system (MCTS) with the objective of preventing left out and drop outs.
Towards strengthening Adverse Event Following Immunization (AEFI) surveillance mechanism, activities such as establishing a national AEFI Secretariat, collaboration with medical colleges for technical and research assistance, involvement of the WHO-NPSP SMO network, revision of the guidelines in tune with global guidelines and capacity building across the country were taken up.

To ensure vaccine safety and effective cold chain management, the National cold chain management information system (NCCMIS) was established to track the functioning of cold chain equipment across the country. A National Effective Vaccine Management (EVM) assessment was also conducted to identify issues and provide solutions to strengthen cold chain and vaccine management.

Mission Indradhanush

As a strategic endeavor, the Ministry of Health & Family Welfare (MoHFW), Government of India, launched Mission Indradhanush in December 2014.

The Mission focuses on interventions to improve full immunization coverage for children in India from 65% in 2014 to at least 90% over the next five years through special catch-up drives.

Four states – Bihar, Madhya Pradesh, Rajasthan and Uttar Pradesh – account for 82 of the 201 high-focus districts and nearly 25% of the unvaccinated or partially vaccinated children.

Based on prioritization, the country has been categorized into high, medium and low focus districts. Phase I of Mission Indradhanush targeted 201 high-focus districts, with four rounds of activity between April and July 2015. Phase II targeted 352 districts (73 districts repeated from phase I) with four rounds of activity between October 2015 and January 2016.

During these two phases of Mission Indradhanush more than 3.7 million children were fully immunized and about 3.7 million pregnant women. Phase III of MI in 2016 will reach out to 216 high focus districts across 27 states/union territories.
The broad strategy includes four basic elements:

1. Ensure revision of micro plans in all blocks and urban areas in each district to ensure availability of sufficient vaccinators and all vaccines during routine immunization sessions. Develop special plans to reach the unreached children in more than 400,000 high risk pockets such as urban slums, construction sites, brick kilns, nomadic sites and hard to reach areas.

2. Increase awareness and demand for immunization services by intensive communication efforts to deliver improved community participation.

3. Intensive training of the frontline workers to build the capacity of these workers for quality immunization services.

4. Ensure engagement and accountability of district administrative and health machinery for implementation of this operation by strengthening district task force meetings.

Integration with the polio programme in the following areas:

- Approximately 400,000 high-risk areas identified as a part of emergency preparedness and response plan for polio eradication, linked to RI session sites to ensure RI services;
- State Task Forces for Immunization (STFIs) and District Task Forces for Immunization (DTFIs) constituted;
- Integrated communication with branding and logo for communication;
- Realigning monitoring strategy to generate actionable data and intensified RI monitoring started by hiring and training external monitors in priority states at the sub-district level;
- UIP reviews integrated with acute flaccid paralysis (AFP) surveillance reviews;
- Intensified and focused training of all ANMs, AWWs and ASHAs in 9 priority states to track children missed for immunization with support by WHO Country Office for India (WCO-India).

The immunization program in India – facts and impact

UIP is one of the largest immunization programs in the world on the basis of quantities of vaccine used, number of beneficiaries, number of immunization sessions organized, geographical spread and diversity of areas covered.

The Universal Immunization Program targets to vaccinate nearly 27 million newborn each year with all primary doses and an additional ~100 million children of 1-5 year age with booster doses. In addition, nearly 30 million pregnant mothers are targeted for TT vaccination each year.
• To vaccinate this cohort of 156 million beneficiaries, ~9 million immunization sessions are conducted.

• To ensure potent and safe vaccines are delivered to children, a network of ~27000 cold chain points have been created across the country where vaccines are stored at recommended temperatures.

• As per Coverage Evaluation Survey (2009), 91% of vaccination in India was provided through Public sector while the private sector accounted for 9%. The survey also identified the location of vaccination in the public sector at the following sites:
  o Fixed sites PHC/CHC/Govt Hospital – 37%
  o Sub center- 19%,
  o Outreach session held at Anganwadi center–26%
  o Outreach session at any place in the village – 9%

The frontline health workers i.e. ASHA’s, AWW and link workers play a critical role in the process by mobilizing beneficiaries to the RI session sites.

**The objectives of UIP are to:**

• rapidly increase immunization coverage
• improve the quality of services
• establish a reliable cold chain system up to the health facility level
• introduce a district-wise system for monitoring of performance
• achieve self-sufficiency in vaccine production
Impact of vaccines in India

The public health use of vaccines in India has had an impressive impact on the morbidity and mortality of Vaccine Preventable Diseases (VPDs). Various studies and surveys over the years have quantified these changes. The infographic below demonstrates the successes but also reminds us of the need to increase our efforts to further strengthen and sustain RI.

### Impact of Vaccines in India

<table>
<thead>
<tr>
<th>Disease</th>
<th>BEFORE VACCINES</th>
<th>AFTER VACCINES</th>
<th>Decrease of Disease Burden</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smallpox</td>
<td>1975 (23,546 cases)</td>
<td>Eradicated ZERO 1977</td>
<td>100%</td>
</tr>
<tr>
<td>Polio</td>
<td>1985 (1,50,000 cases)</td>
<td>Polio-Free ZERO 2012</td>
<td>100%</td>
</tr>
<tr>
<td>Tetanus</td>
<td>1980 (45,948 cases)</td>
<td>2015 (&lt;1 per 1,000 live births)</td>
<td>95%</td>
</tr>
<tr>
<td>Diphtheria</td>
<td>1980 (39,231 cases)</td>
<td>2012 (2,525 cases)</td>
<td>94%</td>
</tr>
<tr>
<td>Pertussis</td>
<td>1980 (2,20,109 cases)</td>
<td>2012 (44,154 cases)</td>
<td>86%</td>
</tr>
<tr>
<td>Measles</td>
<td>1980 (1,14,036 cases)</td>
<td>2012 (15,668 cases)</td>
<td>84%</td>
</tr>
</tbody>
</table>

![Diagram showing impact of vaccines](image)

- **= 10,000 reported cases**
- **= Less than 10,000 reported cases**

Adapted from Johns Hopkins IVAC.
Improving routine immunization coverage

Improving RI coverage involves an understanding of the factors that impact each process or activity. Many opportunities arise to gather information or data that reflect the various components of the immunization delivery mechanism, such as availability of manpower, finances, communication or vaccine and logistics.

During the RI microplanning strengthening workshops, participants (MOs) were encouraged to identify factors based on their field experiences. Some of the important issues identified by them as having a direct bearing on RI coverage were:

- **Health services**—timely dispersal of funds, vacant SCs, weak tracking of children, fixed timing of sessions, quality of service provided;
- **Planning**—weak or absent RI microplans, absence of validation of areas, difficulties in urban areas planning;
- **Health financing**—delayed incentive payments, project implementation plan (PIP) release and alternate vaccine delivery (AVD) payments;
- **Programme leadership**—supervision by MOs, involvement of MOs in RI microplanning, involvement of other departments like Integrated Child Development Services (ICDS) and urban bodies;
- **Policy related**—delays in receiving guidelines;
- **Human Resources**—vacancies of ANMs and doctors, irrational distribution of ANMs;
- **Training**—regular training of manpower, refresher training, quality of training, availability of trainers;
- **Vaccine and logistics**—vaccine requirement calculations, vaccine shortages, vaccine wastage, maintenance of stock register;
- **Health information**—availability of IEC material, session site communication, interpersonal communication skills.

In addition to the above, geographical and social factors also play an important role. Coverage evaluation surveys continue to identify differences as shown in Figs. 1.4 and 1.5.

*Utilize opportunities such as block level meetings, review meetings and field visits to discuss with your staff and identify similar factors.*
Figure 1.4 – Differences in vaccine coverage across geography, caste and wealth status – CES 2009

Figure 1.5- Gender differences in vaccine coverage – HMIS
The data in Fig 1.4 and 1.5 shows differences in coverage between rural/urban areas, within socio-economic strata and even in gender. Why do these differences exist? Is it because of accessibility, awareness, acceptability or health seeking behaviour? Analyzing the available data at planning unit level can help to identify the issues and answers to these questions as well as guide you to find practical local solutions through dialogue.

There is no “panacea” or “cure all” to address these differences. We must constantly be aware that gaps exist and all attempts should be made to close these gaps by finding practical local solutions which target the contributing factors.

If information or data to identify these differences is not readily available, you can explore the utilization of information from other departments such as – census data, land records information for list of areas, election department area listing, Department of social welfare or women and child development, NGOs etc. Another important and real-time source of data is RI monitoring (session and house to house) which can be used even though this may not have a large sample size, it is indicative of issues and can be used locally to initiate measures to close these gaps.

New vaccine introduction

The GoI is vigilant to the changing public health needs of the country and continues to be responsive to the epidemiology of VPDs and actively spearheads introduction of newer vaccines that will have an impact in reducing morbidity and mortality from these VPDs. The commitment to introducing newer vaccines is stated under the key objective 4 of the cMYP 2013-2017 - “Introduce and expand the use of new and underutilized vaccines and technology in UIP”.

The successful elimination of polio and the polio free certification of India and SEARO on 27th March, 2014 is a public health milestone which is a credit for the entire health workforce. India’s commitment to a world free of polio is reiterated by the introduction of IPV as an additional dose along with OPV on 30th November, 2016.

The globally synchronized switch from the use of tOPV to bOPV was done in April 2016 and all activities to ensure a smooth switch across India were successful.

Rotavirus vaccine has been approved by the GoI for inclusion in to the UIP with the phase 1 launch of the vaccine in 4 states (Himachal Pradesh, Odisha, Andhra Pradesh and Haryana) in February, 2016.

Rubella vaccine has been approved for introduction as MR vaccine, thus replacing the measles containing vaccine first dose (MCV1) at 9 months and second dose (MCV2) at 16-24 months.
To address the burden of pneumococcal diseases such as bacterial pneumonia, meningitis and sepsis in children, Pneumococcal Conjugate Vaccine has been approved by the NTAGI for introduction in UIP.

These introductions provide opportunities for strengthening systems and personnel through the introduction preparedness evaluations and trainings which will be conducted prior to the launching of each of these vaccines.

Responsibilities of medical officers in immunization programme management

Planning and review

- Develop comprehensive action plan to improve routine immunization.
- Conduct review of the immunization program at block level. (Refer Unit-8)
- Prioritize sub centres/areas after data analysis (quantitative and qualitative) and identify areas for additional support and interventions.
- Conduct Block Task Force – Immunization meetings with all stakeholders
- Prepare RI-Microplan for the next year including map, plan for alternate vaccine delivery, supervision, social mobilization and waste disposal. (Refer- Unit 3)
- Prepare annual plan with budget corresponding to part C of PIP at block level in consultation with other stakeholders including field personnel involved in immunization. (Refer Unit-13)

Implementation

- Guide the health workers to analyse their data, in order to observe coverage trends, identify bottlenecks/constraints and prepare micro-plan. (Refer Unit-3 and 7)
- Regularly review and update of microplans, HRAs tagging in RI-microplans and provision of immunization services. Regular feedback to health workers. (Refer Unit-3)
- Ensure updated technical and operational guidelines are available with all health workers, including guidelines for use of adrenaline IM in AEFI.
- Respond to AFP/Measles/AEFI as per protocol.
Maintaining beneficiary linelist at block level

- Ensure that health workers **conduct annual survey** to list all immunization beneficiaries and update this beneficiary list monthly. *(Refer Unit-3)*
- **Validate** during field visits sample lists to ensure completeness, correctness and regular updating. Review ANMs RCH registers and guide them to ensure quality.
- **Support the data handler** in compiling and maintaining the line list of beneficiaries with records of their successive vaccinations and analyze this list for program progress and intervention.

Supervision, monitoring and surveillance

- Ensure planned outreach sessions are implemented even if HW is on leave by making alternate arrangements.
- **Conduct field visits** as per the supervision plan; ensure visits of other supervisory personnel. *(Refer Unit-8)*
- **Analyze data** from various reports to identify issues for discussion during review meetings. *(Refer Unit-7)*
- **Review monthly sub-center surveillance reports** for completeness, accuracy, VPD and AEFI cases including AEFI block register and take appropriate action
- Organize **periodic review meetings** at sector and block level to review program performance and decide on course of action.
- Organize **inter-sectoral coordination meetings** at PHC to coordinate with ICDS, local village administration and NGOs
- Facilitate **capacity building of HWs** including the use of adrenaline IM in AEFI and support staff in immunization. *(Refer Unit-11)*
- **Ensure use of coverage monitoring chart, supervision checklist, tracking tools, etc.**

Cold chain and logistics management (refer Unit 4)

- **Guide and supervise the Vaccine and Cold Chain Handler** at the ILR point to effectively manage the cold chain and logistics. Refer Cold Chain Handlers Manual.
- Monitor **preventive maintenance** of cold chain equipment
- Ensure availability and use of standard stock register for maintaining vaccine and logistics
- Ensure that sufficient **vaccines and supplies are available** for all planned sessions
- Ensure **regular distribution** of vaccine and logistics to health workers at outreach session sites through **Alternate Vaccine Delivery (AVD) system**
- Ensure practice of Open Vial Policy and supervise closely
- Ensure regular NCCMIS entries
- Ensure proper storage of returned vials to prevent errors in use
- Ensure availability and replenishment of AEFI kits. (Refer Unit-6)
- Ensure availability and use of job aids at cold chain point

**Community involvement and communication (refer Unit 9)**
- Guide the development of a communication plan
- Support health workers in establishing regular dialogue with community (IPC)
- Establish alliances with other programs (e.g. ICDS) and organizations (e.g., NGOs) with community reach.
- Meet community/Panchayat leaders, teachers and volunteers on a regular basis; encourage them to discuss immunization in their meetings; share hand-outs with immunization information.
- In urban areas involve all Civil Service Organizations (CSOs) in RI. (Refer Unit-12)
- Get feedback from the community to ensure a high quality service.
- Use of RI invitation slips to mothers on the previous day to ensure attendance for RI sessions.
- Monitor tracking of new-borns and dropouts and ensure that due list is shared with ASHA and AWW. Check during field visits.

**Financial management (refer Unit 13)**
- Ensure the timely release of funds.
- Keep record of all funds received and expenditure incurred with vouchers under various heads.
- Monitor timely dispersal of funds at grass root level.
- Send the statement of expenditure and utilization certificate to the district.
Responsibilities of District Immunization Officers in Immunization programme management

Planning

- Guide medical officers in data analysis and attend meetings at block/PHC
- Oversee the quarterly review of RI microplans and provide feedback and solutions
- Ensure all identified HRAs (Including from Mission Indradhanush if applicable) are tagged / incorporated into RI microplans
- Organize inter-sectoral coordination meetings at district to coordinate with ICDS, local/Urban administration and NGOs
- Ensure tracking of newborns, dropouts and availability of session due lists.

Review

- Coordinate the RI review meetings at district level
- Participate in periodic review meetings at sector and block level to review program performance and decide course of action
- Provide feedback to district administration of issues through meetings District Task Force – Immunization and with state through state level meetings
- Review and respond to feedback on immunization activities from various agencies
- Provide regular feedback to CMO/DHO on immunization.

Supervision, monitoring and surveillance

- Develop a rational supervision plan for self and other district officials
- Conduct field visits as per the supervision plan; ensure visits of other supervisory personnel
- Conduct RI session site and House to house monitoring
- Respond to AFP/Measles/AEFI or any other outbreaks as per protocol.
- Analyze data from all reports to identify issues for discussion with MOs during district review meetings
- Review monthly block/PHC reports for completeness, accuracy, VPD and AEFI cases and take appropriate action. Review AEFI data to identify issues.
- Ensure use of coverage monitoring chart, supervision checklist, tracking bag and other tracking tools.
Cold chain and logistics management
- Regularly guide and supervise the Vaccine and Cold Chain Handler at the district vaccine store
- Monitor preventive maintenance of cold chain equipment at district and during field visits
- Ensure that sufficient vaccines and supplies are available for the district at all times
- Ensure regular distribution of vaccine and logistics to all blocks/PHCs and monitor use of vaccine stock registers at all levels
- Ensure availability and timely replenishment of AEFI kits.

Community involvement and communication
- Guide the development of the district communication plan
- Establish alliances with programs (e.g. ICDS), Civil Service Organizations (CSOs)/organizations (e.g., NGOs) with community reach
- Meet community/Panchayat leaders on a regular basis; encourage them to discuss immunization in their meetings; share immunization/monitoring information if required
- In interactions with community seek feedback on quality of RI services.

Training
- Facilitate capacity building of MOs and support staff in immunization.
- Guide MOs in data analysis.
- Facilitate organization of training for ANMs and ASHAs.
- Participate in district level ICDS trainings to sensitize them for their role in RI.

Financial management (refer Unit 13)
- Ensure the timely release of funds to the blocks/PHCs.
- Keep record of all funds received and expenditure incurred with vouchers under various heads.
- Effectively utilise mobility funds for monitoring and field visits
- Monitor timely dispersal of funds at grass root level.
- Send the statement of expenditure and utilization certificate to the state.
Notes:
Learning objectives

- List the diseases preventable by vaccination under the UIP
- Explain the vaccines given under the National Immunization Schedule
- Describe the dose, route, site and technique of administration of vaccines.
National Immunization Schedule

Under the UIP, vaccines are provided to prevent the following VPDs:

- Diphtheria
- Pertussis
- Tetanus
- Polio
- Measles
- Tuberculosis
- Hepatitis B
- Haemophilus Influenzae Type B related diseases (bacterial meningitis, pneumonia and others)
- Japanese Encephalitis
- Encephalitis
- Diarrhoeas due to rotavirus
- Rubella
- Pneumococcal disease
- Haemophilus Influenzae Type B related diseases (bacterial meningitis, pneumonia and others)

The goal of Universal Immunization Programme is to reach out to the following beneficiaries:

**Pregnant women**
- As early as possible - appropriate TT doses

**Infants & children**
- At birth - HepB, BCG, OPV
- Before age 1 year - for Full Immunization
  - 3 doses of OPV, 3 doses of Rotavirus (where applicable), 3 doses of Pentavalent, 2 doses of fractional IPV, 3 doses of PCV (where applicable), MR vaccine - 1st dose, JE 1st dose (where applicable)
- Before age 2 years - for Complete Immunization
  - MR vaccine - 2nd dose, DPT booster, Polio booster and JE 2nd dose (where applicable)

*OPV – oral polio vaccine; BCG – bacillus Calmette-Guerin; Hep B – hepatitis B; PCV – Pneumococcal Conjugate Vaccine; DPT – diphtheria–pertussis–tetanus*
National Immunization Schedule

Table 2.1. National Immunization Schedule for infants, children and pregnant women

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Due age</th>
<th>Max age</th>
<th>Dose</th>
<th>Diluent</th>
<th>Route</th>
<th>Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>TT-1</td>
<td>Early in pregnancy</td>
<td>Give as early as possible in pregnancy</td>
<td>0.5 ml</td>
<td>NO</td>
<td>Intra-muscular</td>
<td>Upper Arm</td>
</tr>
<tr>
<td>TT-2*</td>
<td>4 weeks after TT-1*</td>
<td></td>
<td>0.5 ml</td>
<td>NO</td>
<td>Intra-muscular</td>
<td>Upper Arm</td>
</tr>
<tr>
<td>TT- Booster</td>
<td>If received 2 TT doses in a pregnancy within the last 3 years*</td>
<td></td>
<td>0.5 ml</td>
<td>NO</td>
<td>Intra-muscular</td>
<td>Upper Arm</td>
</tr>
</tbody>
</table>

Fig. 2.1. Different needle positions for vaccine administration
<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Due age</th>
<th>Max age</th>
<th>Dose</th>
<th>Diluent</th>
<th>Route</th>
<th>Site</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>For Infants</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BCG</td>
<td>At birth</td>
<td>till one year of age</td>
<td>(0.05 ml until 1 month)</td>
<td>YES Manufacturer</td>
<td>Intra-</td>
<td>Upper Arm - LEFT</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.1 ml Beyond age 1 month</td>
<td>supplied diluent (Sodium chloride)</td>
<td>dermal</td>
<td></td>
</tr>
<tr>
<td><strong>Hepatitis B - Birth dose</strong></td>
<td>At birth</td>
<td>within 24 hours</td>
<td>0.5 ml</td>
<td>NO</td>
<td>Intra-</td>
<td>Antero-lateral side of mid-thigh - LEFT</td>
</tr>
<tr>
<td><strong>OPV-0</strong></td>
<td>At birth</td>
<td>within the first 15 days</td>
<td>2 drops</td>
<td>-</td>
<td>Oral</td>
<td>Oral</td>
</tr>
<tr>
<td><strong>OPV 1, 2 &amp; 3</strong></td>
<td>At 6 weeks, 10 weeks &amp; 14 weeks</td>
<td>till 5 years of age</td>
<td>2 drops</td>
<td>-</td>
<td>Oral</td>
<td>Oral</td>
</tr>
<tr>
<td><strong>Pentavalent 1, 2 &amp; 3</strong></td>
<td>At 6 weeks, 10 weeks &amp; 14 weeks</td>
<td>1 year of age</td>
<td>0.5 ml</td>
<td>NO</td>
<td>Intra-</td>
<td>Antero-lateral side of mid-thigh - LEFT</td>
</tr>
<tr>
<td>(Diphtheria + Pertussis + Tetanus + Hepatitis B + Hib)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fractional IPV</strong></td>
<td>At 6 &amp; 14 weeks</td>
<td>1 year of age</td>
<td>0.1 ml</td>
<td>NO</td>
<td>Intra-</td>
<td>Upper Arm - RIGHT</td>
</tr>
<tr>
<td>(Inactivated Polio Vaccine)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>dermal</td>
<td></td>
</tr>
<tr>
<td><strong>Rotavirus‡</strong> (Where applicable)</td>
<td>At 6 weeks, 10 weeks &amp; 14 weeks</td>
<td>1 year of age</td>
<td>5 drops</td>
<td>NO</td>
<td>Oral</td>
<td>Oral</td>
</tr>
<tr>
<td><strong>Pneumococcal Conjugate Vaccine (PCV) (Where applicable)</strong></td>
<td>At 6 weeks &amp; 14 weeks</td>
<td>1 year of age</td>
<td>0.5 ml</td>
<td>NO</td>
<td>Intra-</td>
<td>Antero-lateral side of mid-thigh - RIGHT</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>muscular</td>
<td></td>
</tr>
<tr>
<td><strong>Measles / Rubella 1st dose ##</strong></td>
<td>At 9 completed months-12 months</td>
<td>5 years of age</td>
<td>0.5 ml</td>
<td>YES Manufacturer</td>
<td>Sub-</td>
<td>Upper Arm - RIGHT</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>supplied diluent (Sterile water)</td>
<td>cutaneous</td>
<td></td>
</tr>
<tr>
<td><strong>Japanese Encephalitis – 1 @ (Where applicable)</strong></td>
<td>At 9 months-12 months</td>
<td>15 years of age</td>
<td>0.5 ml</td>
<td>YES - Manufacturer</td>
<td>Sub-</td>
<td>Upper Arm - LEFT</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>supplied diluent (Phosphate Buffer Solution)</td>
<td>cutaneous</td>
<td></td>
</tr>
<tr>
<td><strong>Vitamin A (1st dose)</strong></td>
<td>At 9 months</td>
<td>5 years of age</td>
<td>1 ml</td>
<td>-</td>
<td>Oral</td>
<td>Oral</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(1 lakh IU)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# Unit 2: National Immunization Schedule

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>When to give</th>
<th>Max age</th>
<th>Dose</th>
<th>Diluent</th>
<th>Route</th>
<th>Site</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DPT Booster-1</strong></td>
<td>16-24 months</td>
<td>7 years of age</td>
<td>0.5 ml</td>
<td>NO</td>
<td>Intramuscular</td>
<td>Antero-lateral side of mid-thigh – LEFT</td>
</tr>
<tr>
<td><strong>Measles / Rubella 2nd dose</strong>##</td>
<td>16-24 months</td>
<td>5 years of age</td>
<td>0.5 ml</td>
<td>YES Manufacturer supplied diluent (Sterile water)</td>
<td>Subcutaneous</td>
<td>Upper Arm - RIGHT</td>
</tr>
<tr>
<td><strong>OPV Booster</strong></td>
<td>16-24 months</td>
<td>5 years</td>
<td>2 drops</td>
<td>NO</td>
<td>Oral</td>
<td>Oral</td>
</tr>
<tr>
<td><strong>Japanese Encephalitis – 2 @ (Where applicable)</strong></td>
<td>16-24 months @</td>
<td>till 15 years of age</td>
<td>0.5 ml</td>
<td>YES Manufacturer supplied diluent (Phosphate Buffer Solution)</td>
<td>Subcutaneous</td>
<td>Upper Arm - LEFT</td>
</tr>
<tr>
<td><strong>Vitamin A $ (2nd to 9th dose)</strong></td>
<td>At 16 months. Then, one dose every 6 months.</td>
<td>up to the age of 5 years</td>
<td>2 ml</td>
<td>(2 lakh IU)</td>
<td>Oral</td>
<td>Oral</td>
</tr>
<tr>
<td><strong>DPT Booster-2</strong></td>
<td>5-6 years</td>
<td>7 years of age</td>
<td>0.5 ml</td>
<td>NO</td>
<td>Intramuscular</td>
<td>Upper Arm</td>
</tr>
<tr>
<td><strong>TT</strong></td>
<td>10 years &amp; 16 years</td>
<td>16 Years</td>
<td>0.5 ml</td>
<td>NO</td>
<td>Intramuscular</td>
<td>Upper Arm</td>
</tr>
</tbody>
</table>

* Give TT-2 or Booster doses before 36 weeks of pregnancy. However, give these even if more than 36 weeks have passed. Give TT to a woman in labour, if she has not previously received TT.

** Pentavalent vaccine is introduced in place of DPT and HepB 1, 2 and 3.

‡ Rotavirus vaccine is being introduced in phases.

### MR vaccine introduced in phases replacing measles vaccine in the UIP schedule. If first dose delayed beyond 12 months ensure minimum 1 month gap between 2 MR doses.

@ JE Vaccine has been introduced in select endemic districts. If first dose delayed beyond 12 months ensure minimum 3 months gap between 2 JE doses.

$ The 2nd to 9th doses of Vitamin A can be administered to children 1-5 years old during biannual rounds, in collaboration with ICDS.

➢ Human Papilloma Virus (HPV) Vaccine – presently not in schedule.

➢ Td - Tetanus diphtheria to replace TT - to be added in schedule

---

**The goal of UIP is to provide every child and pregnant woman protection from vaccine preventable diseases**
UNIT-3

Routine Immunization Microplanning
Learning objectives

- List the steps involved in developing RI microplans
- Describe the utility of formats in RI microplanning
- Guide HWs to prepare SC/urban health centre (UHC) microplans including maps
- Prepare microplan for block/PHC/urban planning unit
- Review and update the RI microplans to ensure that all HRAs are included.

Key Contents

Common RI microplan issues found in the field 21
Components of an RI microplan 23
Process of microplanning 24
Frequency of major RI activities 24
Microplanning process overview 26
Steps and activities for RI microplanning 27
Timeline of activities in RI microplanning 29
Step 1 - Sensitization and review of existing microplans 30
Overview and utility of the RI formats 35
Making maps: updating maps made simple 40
Step 2 - Sub Centre level Planning for head count survey and training of ASHA/AWW/Link worker/surveyor 42
Step 3 - Conducting head count survey at village/ward 45
Step 4 - Review of all survey forms & consolidation of Sub Centre microplans 54
Step 5 - Finalization of Sub Centre plans and development of final block PHC plan 72
Microplanning for immunization services

RI microplanning is the basis for the delivery of RI services to a community. The availability of updated and complete microplans at a planning unit (urban/rural) demonstrates preparedness of a unit and directly affects the quality of services provided. Microplans are prepared for a one year period but must be reviewed every quarter.

Common RI microplan issues found in the field

- NO microplan available, RI sessions conducted unplanned
- Not aware of the need for mapping and microplanning
- Formats / guidelines not received from district/state
- Microplans prepared by ANMs/health workers not reviewed
- Not aware about method of estimation of beneficiaries
- Logistics calculation was not based on due beneficiaries
- Available at the PHC but not in use.
- Vaccine distribution done on last minute estimation.
- Available but not updated with information on HRA sites
- Recently settled nomadic population not updated in RI microplan
- Not taking into consideration vacant SC
- One microplan is in the computer and a different microplan is used during RI days.

Improving the RI microplan helps to:

- Define the area and population covered by each SC
- Prevents/reduces dropouts
- Prevents left outs
- Identifies HRAs/HRGs including nomadic populations
- Increases the RI coverage
- Strengthens capacity to use data for action.
Levels of RI microplanning

The levels of the health system from the Sub Centre (SC) to the state level is shown in Fig. 3.1. Microplans begin at the SC level and cascade to the district level through the Primary Health Centre (PHC). A sub centre microplan must incorporate all the villages and areas under its administrative area. The PHC microplan incorporates the SC information which is essential for planning and logistics management. Information from PHCs is to be consolidated at the next level which may be the taluk in some states and then to the district or directly to the district in others. Fig 3.2 shows the RI microplanning from SC to district level.

Fig. 3.1. Levels of the health system

Fig. 3.2. RI microplanning from SC to district
Components of an RI microplan

An RI microplan is an integrated set of components to:

- enlist and map all villages/wards/tolas/HRAs
- identify all beneficiaries for RI services through surveys
- estimate and plan the vaccine and logistic requirements including modes of delivery
- preparation of plans for a strong RI service delivery.

An RI microplan consists of a number of formats and documents at various levels. Availability of all the components at the relevant levels will facilitate effective implementation. Table 3.1 lists the components for microplanning in RI at each level.

Table 3.1. List of components for microplanning in RI at each level

<table>
<thead>
<tr>
<th>Level</th>
<th>Components of RI microplan</th>
</tr>
</thead>
</table>
| SC/Urban Health Centre | a) Map of area under SC with names of villages, urban areas including all hamlets (tola), sub-villages, sub-wards, sector, mohalla, hard to reach areas, etc.)  
| 5,000 population in rural and 10,000 – 12,000 population in urban areas | b) Demarcation map – allocate areas for each ANM if more than 2 ANMs are present in a SC. It can also show the exact boundaries and areas for ASHAs and AWWs  
| (ANM to coordinate activities with ASHA & AWW at least 2 days before session) | c) Master list of the area– this list includes all villages/tolas/HRAs/wards/mohalls  
| Responsible person : ANM | d) An estimation of beneficiaries  
|  | e) An estimation of vaccines and logistics  
|  | f) ANM work plan including mobilization plan  
| PHC/Urban Planning unit | a) Map of PHC showing the SC area demarcation  
| Responsible person : Medical officer in-charge / RI nodal MO | b) RI microplans from all SC  
|  | c) Alternate Vaccine Delivery (AVD) plan and route chart  
|  | d) Supervision plan  
|  | e) Cold chain contingency plan  
|  | f) Immunization waste disposal plan  
|  | g) IEC and social mobilization  
|  | h) Training plan (if applicable)  
|  | i) Budget  

Immunization handbook for Medical Officers

23
An updated microplan ensures:
- All boundaries of the catchment area are identified
- Complete maps are in place to ensure that all personnel are aware of their areas and that no villages or high-risk population pockets have been left out
- All beneficiaries have been identified and information is available on who has to be vaccinated and with which antigen.

Process of microplanning

The RI microplan is a dynamic tool that requires regular conduction of reviews and surveys in order to be effective. These activities provide opportunities for planning units, districts and the state to modify RI microplans based on real-time manpower availability, movement of beneficiaries and also respond to important coverage and monitoring indicators. Table 3.2 gives the frequency of major RI activities.

Frequency of major RI activities

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annually</td>
<td>Preparing and generating new RI microplans</td>
</tr>
<tr>
<td>Half yearly</td>
<td>House to house survey and head counting</td>
</tr>
<tr>
<td>Quarterly</td>
<td>RI microplan review</td>
</tr>
<tr>
<td>Monthly</td>
<td>Session due list review at sub centre</td>
</tr>
<tr>
<td>Weekly</td>
<td>Session due list update after every session</td>
</tr>
</tbody>
</table>
Annually: Preparing and generating new RI microplans including house to house survey and head counting

- Ensures that all areas are included into the list; confirm the master list of villages and HRAs.
- Provides actual population and beneficiary counts through house to house survey and head counting,
- Generates needed information for planning sessions, vaccine and logistic calculations.

This activity is large scale and needs to be synchronized with district.

Half yearly: Only conduct the house to house survey and head counting. This activity will:

- Help to identify any new sites for inclusion / mobilization
- Update the beneficiary due lists for effective mobilization

This activity needs to be supervised and planned in coordination with ICDS and partners

Quarterly: RI microplan review, helps to:

- Update the plans to incorporate information on sub centres where staff is on leave or if it has become vacant.
- Respond to changes in vaccine delivery and inclusion of new areas - nomads / HRAs and other issues based on monitoring results.

This activity takes time and requires planning.

Monthly: At Sub centre ANM should

- Review due lists of all the sessions held in the previous month.
- Update coverage monitoring chart to quantify left outs and dropouts.

ANM should share the salient points with the sector medical officer. MO can make plans to visit Sub centre during this activity.

Weekly:

After every RI session ANM and ASHA/AWW workers should review the session due list, identify drop-out / left-out beneficiaries and enter their names into the next session’s due list for follow-up and mobilization.

The medical officer should try to attend a full RI session at least once in two weeks. This is an opportunity to provide solutions to practical problems in the field.
Microplanning process overview

Microplans should be prepared annually based on head count/survey and be reviewed every quarter. The steps in the process of developing RI microplans are shown in Figs. 3.3 while Fig. 3.4 gives an overview of the major activities to be conducted. The process to prepare new microplans should be initiated when the state/district task force for immunization decides to conduct this activity. Refer Gantt chart in Fig 3.5 for suggested timelines.

**Fig. 3.3. Steps for developing RI microplans**

**STEP 1**
Block PHC/UHC meetings

- Sensitization meeting with MO / ANMs / staff
- Sub centre ANM RI microplan review meeting

**STEP 2**
Sub Centre level Planning

- Planning for head count survey
- Training of ASHW / AWW/survey or for head count / survey

**STEP 3**
Head count survey at village / ward

- Conducting the house to house survey / head counting

**STEP 4**
Review & consolidation of SC microplan

- Review of field formats
- Review SC master list
- Develop draft SC RI microplan in formats for finalization

**STEP 5**
Finalization at PHC/UHC

- Review of SC formats
- Finalize the master list of areas in the SC
- Finalization of SC RI microplan
- SC final beneficiary due list and relevant formats
- Develop PHC/UHC RI microplans

**Fig 3.4. Overview of major activities in RI microplan development process**
**Detailed list of activities at RI microplan development**

To simplify the process of developing RI microplans, Table 3.3 below enlists in detail the activities at each step. This table can also be used as a checklist to review the process and guide the actions of medical officers and ANMs.

**Table 3.3. Steps and activities for RI microplanning**

<table>
<thead>
<tr>
<th>Steps</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>STEP 1</strong> Block PHC/UHC meeting-&lt;br&gt; Orientation meeting&lt;br&gt; ANM RI review meeting- review of existing microplans &amp; inclusion of all areas</td>
<td>• Confirm area demarcation of subcentres&lt;br&gt; • Confirm area demarcation among ANMs, especially in subcentres where more than one ANM is posted.&lt;br&gt; • Generate a master list of villages/areas, Include ALL areas in RI microplan&lt;br&gt; • Record sub centre wise information&lt;br&gt; • Use data on SC performance&lt;br&gt; • Conduct training of ANMs for area survey&lt;br&gt; • Prepare SC plan for head count / survey</td>
</tr>
<tr>
<td><strong>STEP 2</strong> Planning for SC level head count survey and training of ASHA/AWW/Link worker/Surveyor</td>
<td>MO to decide venue of meeting- at each SC or if at PHC then conduct with only 2 to 3 SC combined at a time&lt;br&gt; • Confirm area demarcation between ASHA, AWW /LW/ surveyor&lt;br&gt; • Create working maps for each area&lt;br&gt; • Conduct training to undertake head count &amp; generate beneficiary list&lt;br&gt; • Plan to walk through areas to ensure clear area demarcation/HRA identification</td>
</tr>
<tr>
<td><strong>STEP 3</strong> House to house survey village/ward level -ASHA/AWW/Surveyor</td>
<td>• As per the plan, the ASHA/AWW/LW/Surveyor with assistance from mobilizers will conduct the area survey. This is NOT to be done on RI days.&lt;br&gt; • During the survey&lt;br&gt; ▪ Maximum of 25 to 30 houses should be covered per day.&lt;br&gt; ▪ Collect information of pregnant women, infants and children.&lt;br&gt; ▪ Survey to be completed in 7 to 10 days&lt;br&gt; • Generate beneficiary list for the village/ward&lt;br&gt; • Ensure monitoring of the process by ANM, ICDS supervisors, Sector Medical Officer, any other</td>
</tr>
</tbody>
</table>
### STEP 4
**Review & consolidation of the Sub centre microplan**

Conduct review meeting at SC – involving AWW /ASHA / Link worker / surveyor. Sector MO oversight will be beneficial.

**ANM to:**
- Review completeness of all formats of the area
- Review the master list of areas in the SC
- Review the area of demarcation
- Review the number of HRA in the SC
- Review lists of identified beneficiaries
- Develop SC RI microplan for finalization
- Develop community mobilization plan for each session site and sub centre area

### STEP 5
**Review and finalization of SC plans and development of final block PHC plan**

- Finalization of area demarcation of ANMs
- Finalization of areas and HRAs in all SC microplans
- Review of all SC formats and approval of microplans
- ANM to complete filling of all SC formats and submit
- Develop the session due list for RI sessions
- Ensure availability of beneficiary due listing for all sessions
- SC Maps availability
- Development of PHC RI microplan
This Gantt chart is indicative of average times needed for the major activities in developing the RI microplan. Variations are a reality and reasonable timelines specific to your area can be decided in discussion with district colleagues.
Step 1 of the process for developing/updating the RI microplans involves 2 meetings:

1. A sensitisation meeting of all MOs, ANMs and other staff
2. ANM RI microplan review meeting

1. Sensitization meeting at PHC/Urban health center:

Call for a meeting at your PHC/ UHC to bring the focus on routine immunization and the process.

This meeting will:
- Sensitize all the staff on the process and their roles in RI microplanning
- Delegate activities to specific personnel with timelines
- Encourage discussion on issues
- Train ANMs on use of formats and conduction of head count / survey
- Finalize dates and schedule for the meeting with ANMs at PHC

In setups with multiple medical officers (Block/PHC/UHC): Conduct a meeting of all the MOs and ANMs to inform them of the plan for improving / updating the RI Microplan. Demarcate area of the PHC into sectors and allot each to a MO for supervision and follow-up. Sensitize them of the need for this activity and the process. Define roles; give specific responsibilities with reasonable timelines. Give specific responsibilities with focus on “what has to be done” “by whom” and “when”.

In setups with single Medical Officer (PHC/Additional PHC/UHC): Call for a meeting of all staff and inform them of the plan for improving / updating the RI Microplan. Sensitize them of the need, describe the contents of RI microplan forms and address any queries. Give specific responsibilities with focus on “what has to be done” “by whom” and “when”.
During this sensitization meeting:

For ANMs -

- Distribute at least 2 blank Form 1 sheets to all ANMs. Using the SOP for RI form 1 (page 39) discuss the format with them and ensure they are clear on how to use it.
- In Form 1 explain that a key element is to confirm areas under each subcentre and this form will become the master list. Ensure inclusion of:
  - All villages and their hamlets, tolas
  - Urban/peri-urban areas and their wards/sub wards/mohalla
  - Migratory and non migratory high risk settlements (slums, constructions sites, nomads, brick kilns)
- Record each HRA/Brick Kiln etc. in a separate row in the master list of areas
- Train ANMs on the process of conducting headcount survey (refer SOP for RI form 3).
- Instruct them to come prepared for the ANM RI review meeting with any RI microplan documentation available with them
- Finalize a schedule for meeting the ANMs.

2. ANM RI microplan review meeting - as per decided schedule:

This meeting should be conducted in small batches over 2 or 3 days to ensure that each ANM gets enough time to discuss and bring out issues in the planning process for RI.

The agenda points for discussion with each ANM must include -

a. Clear area demarcation for each sub center and ANM area
b. Review of Form 1 – master list
c. Proposing plan for missed areas, vacant sub centers including plans for areas without ANMs
d. Prepare maps (this will require a realistic timeline) also refer Unit 12
e. Assess adequacy of RI sessions
f. Proposing a communication plan
g. Any other issues related to RI microplanning

This step should not be completed in a SINGLE meeting – 2 to 3 days will be required, which need not be consecutive days. Plan these days taking into consideration all other activities and develop a schedule so ANMs can plan well.
Participants:
- Sector MO, Health supervisors, LHV, ANMs, key persons assisting MO/IC, Block program manager-National Health Mission, CDPO, ICDS supervisors etc.
- Immunization Field Monitor / WHO-Field monitor/SMNet partners where applicable

Preparations for the ANM RI microplan review:

The data manager of the PHC should generate the needed data for the PHC and each SC.

Data to be used: Review monitoring and coverage reports to identify issues in provision of immunization services with special emphasis on HRAs. Some suggestions are given below:

a) Vacant sub-centre areas  
b) Areas with no sessions planned  
c) Areas with no mobilizer assigned  
d) Sessions with poor mobilization  
e) Where planned sessions were not held  
f) Areas with low coverage  
g) Status of due-list updating, especially for migrants and new-borns  
h) Inadequate supply of vaccines and logistics  
i) Any serious AEFI  
j) Staff position of ANM, AWW, ASHA, Supervisor etc.  
k) Status of AVD/transportation (vehicle breakdown etc.)

Calculation of drop-out figures for each subcenter will help in identification of issues. However, this may not reflect specifically to each RI session site or village. Few suggested differences to be calculated per subcentre are between BCG and MCV1; Penta1 and Penta 3; MCV1 and MCV2; Penta 1 and OPV1 and Penta 3 and OPV3. Refer Unit 7 for details.

Table 3.4 below provides some of the data sources that can be used to help in planning the RI microplan. However, this is not an exhaustive list and if other data sources are available, they may also be used to compare information.
### Table 3.4 - Sources of information for listing of areas and beneficiaries

<table>
<thead>
<tr>
<th>Information / Data required</th>
<th>MOIC</th>
<th>ANM</th>
<th>ICDS Supervisor</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Geographic</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>List &amp; map of villages including hamlets / urban areas/wards</td>
<td>List &amp; map of villages including hamlets / urban areas/wards (SC catchment area)</td>
<td>List &amp; map of villages including hamlets / urban areas/wards</td>
<td></td>
</tr>
<tr>
<td><strong>Demographic</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total &amp; beneficiary population (Census/revenue records)</td>
<td>Total &amp; beneficiary population (service records), migrants</td>
<td>0 -6 years registers, eligible couple register, etc.</td>
<td></td>
</tr>
<tr>
<td><strong>Programmatic</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Existing RI microplans, Polio microplans, monitoring feedback, Mission Indradhanush microplans (where applicable) List of HRAs</td>
<td>Existing sub centre RI microplans, Polio microplans, monitoring feedback, Mission Indradhanush microplans (where applicable) List of HRAs, VHND microplans</td>
<td>VHND microplans</td>
<td></td>
</tr>
<tr>
<td><strong>Administrative</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff vacancy to identify vacant SC</td>
<td>ASHA/ Mobilisers list to identify villages for focus</td>
<td>AWW/ helper list</td>
<td></td>
</tr>
<tr>
<td><strong>Epidemiologic</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VPD outbreaks</td>
<td>VPD data</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Social mapping</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NGOs, Practitioners, Community centres, schools</td>
<td>Influencers, Possible session sites</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Suggested questions during ANM RI review meeting:**

- Are all areas identified and included in the SC plan?
- Where are the unreached populations?
  - Areas with highest number of unimmunized children
  - Areas with mobile/migrant populations
- Where are the hard-to-reach populations?
  - Low coverage areas
  - Accessibility compromised areas
- Where is the population?
  - Are there areas/villages with large population?
  - Border/peri-urban areas?
- Are there problems with access to immunization services?
  - Catchment areas with Penta or other antigen <80%?
- Where is utilization of services low?
  - Areas with high drop-outs

**Outputs expected from this meeting:**
- Master list of all areas for each sub centre in Form 1
- Plan for conducting house to house survey for each Sub centre
- Timeline for conducting the house to house survey / head counting

**Roles and responsibilities:**

<table>
<thead>
<tr>
<th>Personnel</th>
<th>Activities to perform</th>
<th>Follow up by</th>
</tr>
</thead>
<tbody>
<tr>
<td>MO/Ic</td>
<td>• Preparing for and conducting first meeting at PHC</td>
<td>DIO</td>
</tr>
<tr>
<td></td>
<td>• Conduct SC RI review with few ANMs per day</td>
<td></td>
</tr>
<tr>
<td>Sector MO</td>
<td>• Actively participate in first meeting at PHC</td>
<td>Medical Officer in charge</td>
</tr>
<tr>
<td></td>
<td>• Review progress of SC areas in allotted sector</td>
<td></td>
</tr>
<tr>
<td>ANM</td>
<td>Generate village list for each SC in coordination with frontline workers for the meeting</td>
<td>Sector MO / LHV / designated ANM</td>
</tr>
<tr>
<td>CDPO</td>
<td>Sharing of village list and AWW centre details</td>
<td>BPO</td>
</tr>
<tr>
<td>ICDS supervisors</td>
<td>Provide information on any areas / populations that may be overlooked</td>
<td>CDPO</td>
</tr>
</tbody>
</table>

*DIO – District Immunization Officer; BDO – block development officer; LHV – lady health visitor*

Each of the steps in the following pages includes detailed explanation of the RI microplanning formats to be used for each activity.
Overview and utility of the RI formats

A set of formats have been developed to collect and collate data to prepare RI microplans for an area. The table 3.5 below enlists these formats and the information they collect.

**Table 3.5. RI microplanning formats and utility**

<table>
<thead>
<tr>
<th>Level of use</th>
<th>RI Form</th>
<th>Utility</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PLANNING FORMS</strong></td>
<td>1</td>
<td>• Master list of all the villages in sub centre area</td>
</tr>
<tr>
<td>to be filled by ANM</td>
<td></td>
<td>• Plan for conduction of survey</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Sub centre map</td>
</tr>
<tr>
<td><strong>SURVEY FORMS</strong></td>
<td>3</td>
<td>Enlists all houses and occupants with focus on pregnant women and children in the age group of 0 to 2 years</td>
</tr>
<tr>
<td>Used In the Survey by ASHA / assessor area</td>
<td></td>
<td>4 Enlists details of identified pregnant women</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5 Enlists details of infants / children identified</td>
</tr>
<tr>
<td><strong>SUB CENTRE FORMS</strong></td>
<td>6</td>
<td>RI Session beneficiary due list (to be made after SC microplan is approved by MO)</td>
</tr>
<tr>
<td>To be filled by ANM</td>
<td>7</td>
<td>RI session plan</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>RI Session injection load and vaccine distribution plan</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>Per session estimation of vaccines &amp; logistics</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>ANM work plan / roster</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>Communication plan for SC</td>
</tr>
<tr>
<td><strong>PHC FORMS</strong></td>
<td>12</td>
<td>SC workload and Sessions plan</td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>PHC vaccine delivery plan including alternate vaccine delivery plan</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>PHC vaccine and logistics per sub centre</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>PHC – RI session supervision plan</td>
</tr>
<tr>
<td></td>
<td>16</td>
<td>Emergency plan for vaccine storage</td>
</tr>
<tr>
<td></td>
<td>17</td>
<td>Bio-medical waste management plan</td>
</tr>
<tr>
<td></td>
<td>18</td>
<td>Communication plan for PHC/UHC</td>
</tr>
</tbody>
</table>
Overview of RI Forms 1 and 2

**RI Form 1**
- Village / area Master list
- Area Survey planning template
- Basis for conducting house to house survey

**RI Form 2**
- Map of Sub centre area
### SUB CENTRE AREA MASTER LIST and SURVEY PLANNING FORM

RI Form 1

<table>
<thead>
<tr>
<th>s.no</th>
<th>Name of Villages/ Hamlets / Tolas / HRA</th>
<th>Total number of households in this area?</th>
<th>High Risk Area?</th>
<th>Name of ASHA designated for this area?</th>
<th>Name and contact number of person doing survey</th>
<th>Designation (encircle applicable)</th>
<th>Dates of Survey - From / To</th>
<th>FILL AFTER Survey - FOR ANM USE ONLY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Total Population</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Total Pregnant Women</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Number of new born (0 to 1 month) of age</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Number of infants (1 month to 2 yr of age)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Number of children (1 to 2 yr of age)</td>
</tr>
</tbody>
</table>

### Notes:

1. Slums with migration
2. Nomads
3. Brick Kiln
4. Construction Site
5. Others (Fisherman villages, riverine areas with shifting populations, etc.)
6. Non migratory (settled population), hard to reach areas

Signature of ANM: ___________________________  Signature of Medical Officer: ___________________________
**SOPs for using RI Form 1**

This format is to be used by the ANM of a sub centre area. Each ANM should list the areas in her sub centre including HRAs/nomadic sites in separate rows.

**Column A** - Serial numbers are to be allotted to each area. Numbers are not to be repeated and must be in serial for one sub-centre area. If the areas per sub-centre need to be entered on more than one sheet, the numbering will continue until the last area for that sub-centre.

**Column B** - Ensure all the Villages / Hamlets / Tolas / High Risk Areas (HRAs) details are entered. The classification of the HRAs is given as footer and the relevant number to be entered in brackets along with the name of HRA.

- For HRAs, (including brick kilns or nomadic/construction sites) **each site must be entered into a separate row.** Refer to existing polio microplans, census lists, maps, high risk area lists, and interactions with ASHA / AWW or Panchayat Raj Institution (PRI) members to ensure the inclusion of all areas in the sub centre area. This will form the **master list** for each sub centre. **This is a critical activity.** Update this format as information is received or every quarter. (Refer Unit 12 for details on high risk areas)

**Column C** – enter the number of houses as per information available. If information is not available an approximate number can be entered. For areas such as nomadic sites and brick kilns household numbers are important or approximations must be entered.

**Column D**, if the entered area is an HRA then encircle “yes”.

**Column E**, Enter the name of the ASHA responsible for the area.

**Column F**, the name and contact number of the person who will conduct the survey should be entered. If the area does not have an ASHA or the position is vacant then, name of the person who will be delegated to conduct the area assessment should be entered.

**Column G**, The survey can be done by the local AWW / link worker / others in consultation with the Medical Officer (MO) **ONLY** after undergoing training. Enter the relevant designation.

**Column H**, The area survey is to be completed in seven to 10 days (See Fig 3.5). The dates for conducting this activity and the persons who will conduct the survey will be decided by the ANM in consultation with the MO. The **From** and **To** dates are to be entered here.

**Columns I**, The last shaded columns are for use **AFTER** the survey.
RI Form 2– Sub-centre map

This form provides space for drawing a map of the SC area. A sample map is also given and health workers are encouraged to put forward simple drawings (see Figs 3.6, 3.7 and 3.8). The maps should be able to show at least the following:

- All the villages in the SC area, with names
- Shading of parts of a village to demonstrate the ASHA demarcation areas
- Location of the SC
- Location of all RI session sites
- Major roads
- Rivers streams.
- AEFI management centres

Each SC should have a map which helps to clearly demarcate the villages and areas to ensure that the frontline workers have clarity in operations, and avoid overlap or loss of services to the beneficiaries.

Encourage ANMs and ASHA to draw simple line diagrams of the areas; it is not necessary to have elaborate maps. (see next section)
Making maps: updating maps made simple

Maps help to identify borders and areas of administration. They also help to identify areas that are in dispute or where workers have confusion.

In RI, simple maps are required (see Figs 3.6/3.7/3.8). The capacity to draw varies from person to person. Encourage your ANMs by showing printouts of the maps given as examples in this unit or demonstrate how simple line drawings can help them to be more sure and confident of their areas. Convey this message also to the respective ASHAs and AWWs of the area in subsequent meetings.

A good start for making maps begins with already existing maps. You should access the following sources:

- Polio maps
- Maps from local administration, e.g. municipal corporation, land department, election section, local panchayat
- Local area maps from other sources.

(Refer Unit 12 for map utilization)

Ask the HWs to come to PHC with all the required data and guide them to prepare the SC/UHC microplans including maps.

Prepare a map of the block/PHC/Urban Planning Unit area, i.e. map showing the boundaries of SC/UHC, session sites, HRAs and demarcation of areas by each supervisor.

**Fig. 3.6. Sample map showing area demarcation 1**
Update the map of SC/urban health centre showing:

- the SC, villages, areas, hamlets and HRAs
- all Anganwadi centres, session sites and session days
- distance from the ILR point and the mode of transport
- landmarks such as panchayat bhavan, schools, roads, etc.

Fig. 3.7. Sample map showing area demarcation 2

Fig. 3.8. A simple line diagram map
Step 2: Sub Centre level Planning for head count survey and training of ASHA/AWW/Link worker/surveyor

The finalization of the head count survey plan and the training of the ASHAs/AWWs/Link workers/surveyors is the second step in the process for developing RI microplans. The role of the ANM is to guide the ASHAs and AWWs of the area in order to conduct the survey effectively and to use of their close ties with the community to identify all beneficiaries.

**Fig. 3.9. Sub centre survey planning meeting— personnel and activities**

Key components this activity should include:

- Review of area demarcation between ASHA, AWW & surveyors as per Form 1
- Sharing dates of survey and finalize with ASHAs/AWWs/link workers
- Creating working maps for each area
- Training ASHAs/AWWs/link workers to undertake head count & generate beneficiary list
- If required, plan to walk through areas to ensure clear area demarcation/HRA identification.

**Medical Officer to decide on the venue for holding this meeting:**

- At PHC for 2 to 3 Sub centres at a time– about 15 to 20 ASHA/AWW/Link workers in each batch, OR
- At Additional PHC, OR
- At the Sub centre.

**Participants for this meeting:** Sector Medical Officers, sub centre ANM, ICDS- lady supervisor, all ASHAs,AWWs,Link Workers, Mobilizers as well as ASHA facilitator of the villages in the sub centre.
Preparations

On meeting day

- Share the information and requirements for the meeting with respective ASHAs/AWWs/link workers at least a week in advance. Encourage them to identify any new areas that may not have been included or any new nomadic or construction sites in their areas.

- Each ASHA and AWW should prepare a list of villages/areas as per the available information. This list should also include the HRAs and any other identified populations that require special services. Cross check and make corrections in the master list, if any.

- Discuss and plan logistics for the survey – adequate number of formats (Forms 3, 4, 5); chalk for house marking;

The MO/ANM need to share the status of RI in their area and explain the importance of the RI microplanning. Aspects that should be covered during the discussions are listed below.

**Area demarcation between ASHA, AWW, link worker and mobilizer:** Ask each ASHA/link worker to readout the list of villages/urban areas she visits/has been allocated. The AWWs of these areas can refer to the list they have prepared and add to or clarify the list of the ASHA. In some urban areas where AWW workers are not available, other key local persons can be approached for listing of areas.

Identify areas in each SC requiring a walk-through to verify demarcation and that all HRAs are included in the list of areas.

Using Form1 distributed during the PHC planning meeting, finalize the personnel who will conduct the headcounting and the approximate dates for completing the survey (if not already done). Allow for corrections of the master list at all times. Any information is important and will benefit the area.

**Training of ASHA/ AWW to undertake head count and generate due beneficiary list:**

Distribute copies of Forms 3, 4 and 5 to each ASHA/ AWW. Explain the process (use SOPs of each form) for conducting the house to house survey of the areas, the information they will collect and the process for filling up these forms.

Develop a practical timeline considering that a maximum of 25 to 30 houses are to be covered in one day. This will ensure quality and allow the workers to collect detailed information on each family. **Rushing this process will lead to a compromise in quality.**
Creating working maps for each area: Working maps are simple maps (Figs 3.6/3.7/3.8) which need not be to scale, but provide an overview of the areas with clear lines of demarcations if there are more than one HW. These maps should be developed before going out into the area. Finer details may be added to this map during or in the next part of the process. Refer section on “Making maps” in this unit and also Unit 12.

Walk through of areas to ensure clear area demarcation/HRA identification: Once the training is completed the MO/ANM along with the ICDS LS should visit some areas. Priority should be given to those areas where confusion of demarcation exists and HRA areas. A walk through will bring an agreement on the lines of demarcation and will verify all HRAs are included in the list of areas. If there are a large number of areas, or the identified areas are accessibility compromised, the field visit can be covered as per a practical timeline over a few days.

Before closing the meeting, confirm the dates for the area survey by each person as per Form 1 and clarify any doubts of the participants. Coordinate with ICDS supervisors to ensure monitoring and oversight. Working maps generated can be strengthened with additional information during the survey. Any changes should be intimated to the concerned ANM and ICDS supervisors.

Outputs expected
- Confirmed plan for area survey with timelines and names mentioned in Form 1.
- Refined master list of all areas in the SC
- Simple area maps for each ASHA area

Roles and responsibilities

<table>
<thead>
<tr>
<th>Personnel</th>
<th>Activities to be performed</th>
<th>Supervisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>MO/Sector MO</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| MO | • Will support the SC personnel to finalize plan for area survey  
• Supervise the survey with field visits | MOIC |
| ANM |
| • Area demarcation for ASHAs/AWWs  
• Develop a reasonable timeline for survey  
• Will support the ASHA/AWW for survey  
• Supervise the survey with field visits | Sector MO/LHV/designated ANM |
| ASHA |
| • Contribute to finalizing the master list  
• Conduct the house-to-house survey | SC ANM/ASHA facilitator |
| AWW |
| • Conduct/assist in the house to house survey  
• Identify beneficiaries/HRAs/missed areas/dropouts/left-outs | SC ANM/LS |
The head count survey or house-to-house survey is the third step of the RI microplanning process. The survey will ensure enrolment of all beneficiaries in an area. It is to be conducted by the ASHA/AWW/Link worker/surveyor (after training) as specified in Form 1. No person will conduct this activity without having undergone the training as mentioned in Step 2. Each ANM will have a list of the SC areas and the dates for conducting the visits. This is to be shared with the LHV/Ladies Supervisor (LS) of ICDS to enable field visits and monitoring.

**Key activities to be conducted:**

- ASHA/AWW/LW/surveyor will conduct the survey as per the plan in Form 1. Support may be sought from local residents while conducting the survey. This survey is NOT to be done on RI days.

- During the survey
  - A maximum of 25 to 30 houses should be covered per day.
  - Information of ALL households to be entered in Form 3.
  - On identifying a pregnant woman in a household, enter her information into Form 4.
  - On identifying infants and children up to 2 years of age, enter information in Form 5.
  - Process to be completed in 7 to 10 days per area.

- Monitoring of the process by ANM/LHV/LS/Sector Medical Officer/Medical Officer In-charge/DIO.

- Involve other departments (e.g. education, PRI, etc.) and block/district administration in supervision of this activity.

The minimum activities to be conducted are as follows:

**Participants**

Designated ANM, ASHA, AWW, LW or identified person for conducting the survey, Sector MO, ASHA supervisor, LS, others.

**Preparations**

The ANM should review the available lists and maps from Step 2 before beginning Step 3. During the period of survey, ANM and LS (ICDS) will make coordinated visits to ensure that the ASHAs/AWWs/LW/surveyors conduct the activity as per the training given.
ANM/ASHA facilitator/LS should verify at least 5 households. Adequate numbers of formats need to be made available for this activity to make maximum use of the resources in the field. All queries need to be addressed at the earliest. Upon completion of the activity and after verification the ANM should sign the Forms 3, 4 and 5.

**Use of local mobilizers**

It is essential that the ANM interacts with the mobilizers and encourages other influencers in the village to participate in the survey activity.

**Supervision**

Sector MOs will visit the areas and provide oversight during this important phase of the microplanning exercise. An overview of Forms 3, 4 and 5 is given in Fig. 3.10.

**Fig. 3.10. Overview of RI Forms 3 to 5**

<table>
<thead>
<tr>
<th>RI Form 3</th>
<th>RI Form 4</th>
<th>RI Form 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area house-to-house survey format</td>
<td>Information on pregnant women</td>
<td>Infant/child information</td>
</tr>
</tbody>
</table>

**Outputs expected**

- ASHA/AWW/LW/surveyor conducting the survey as per training
- Completion of house-to-house survey
- Forms 3, 4 and 5 identifying all beneficiaries for each area.

**Roles and responsibilities**

<table>
<thead>
<tr>
<th>Personnel</th>
<th>Activities to be performed</th>
<th>Supervisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sector MO</td>
<td>Supervise with field visits</td>
<td>MOIC</td>
</tr>
<tr>
<td>ANM</td>
<td>Supervise with field visits</td>
<td>Sector MO/LHV/designated ANM</td>
</tr>
<tr>
<td>ASHA</td>
<td>Conduct survey and fill Forms 3,4,5</td>
<td>SC ANM/ASHA facilitator</td>
</tr>
<tr>
<td>AWW</td>
<td>Conduct survey and fill Forms 3,4 and 5/assist in survey</td>
<td>SC ANM/LS</td>
</tr>
</tbody>
</table>
## House to House Survey form

**ASHA/AWW-Assessor Name/Ph No.:**

**Sub-Centre Name:**

**Name of ANM:**

**ASHA/AWW-Facilitator Name/Ph No.:**

**Area Name and No as per Form 1:**

**Date of Visit:** dd/mm/yy

---

### Family Details

<table>
<thead>
<tr>
<th></th>
<th>Name of head of family</th>
<th>Father's name</th>
<th>How many family members are living in this house? (Include All adults &amp; children including new born)</th>
<th>Is there any newborn/child aged less than 1 month in the family? (If YES, go to form 5)</th>
<th>Is there any child aged 1 month and 1 year in the family? (If YES, go to Form 5)</th>
<th>Is there any child aged between 1 to 2 Years in the family? (If YES, go to form 5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td></td>
<td></td>
<td></td>
<td>Yes / No</td>
<td>Yes / No</td>
<td>Yes / No</td>
</tr>
<tr>
<td>B</td>
<td></td>
<td></td>
<td></td>
<td>Yes / No</td>
<td>Yes / No</td>
<td>Yes / No</td>
</tr>
<tr>
<td>C</td>
<td></td>
<td></td>
<td></td>
<td>Yes / No</td>
<td>Yes / No</td>
<td>Yes / No</td>
</tr>
<tr>
<td>D</td>
<td></td>
<td></td>
<td></td>
<td>Yes / No</td>
<td>Yes / No</td>
<td>Yes / No</td>
</tr>
<tr>
<td>E</td>
<td></td>
<td></td>
<td></td>
<td>Yes / No</td>
<td>Yes / No</td>
<td>Yes / No</td>
</tr>
<tr>
<td>F</td>
<td></td>
<td></td>
<td></td>
<td>Yes / No</td>
<td>Yes / No</td>
<td>Yes / No</td>
</tr>
<tr>
<td>G</td>
<td></td>
<td></td>
<td></td>
<td>Yes / No</td>
<td>Yes / No</td>
<td>Yes / No</td>
</tr>
<tr>
<td>H</td>
<td></td>
<td></td>
<td></td>
<td>Yes / No</td>
<td>Yes / No</td>
<td>Yes / No</td>
</tr>
</tbody>
</table>

---

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Total</th>
<th>Total</th>
<th>Total</th>
<th>Total</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**Signature of ASHA/assessor:**

**Verified by ASHA Facilitator (Signature):**

**Verified by ANM (Signature):**

**Sheet Number:________**
SOPs for using RI Form 3

- Form 3 is to be used when conducting the house to house survey.
- Each sheet must have the area name and number as given in Form 1. The ANM must instruct the surveyor to enter this.
- This assessment is not to be done on RI days.
- A household is defined based on “Kitchen” or “Chullah”
- Each sheet has information for 15 households. Multiple sheets for each area will be required and must be made available.
- A maximum of 25 to 30 houses should be covered per day. Calculations for the number of days will depend on the timeline as per DTF-I decisions.

Details of the first house visited and the last house on each sheet must be entered in the space provided. When multiple sheets are used in an area, each sheet must be numbered in the space provided at the bottom right of the form. The working map of the area prepared will help in identifying the roads and location of houses. Changes to this map can be made during the survey.

All houses in the area must be visited and information entered into the form. Each household is to be identified by a number (Column A). **This is the household identification number.** The numbering of households is to be continuous until the area is completed. The assessment of the area may take more than one day but the **numbering of the houses will be in serial order for the entire area.** Restart of numbering will be done when a new area is being assessed by the same person. House marking should be done with chalk/geru indicating the serial No of the household and date of survey, as shown in Fig. 3.11.

**Fig. 3.11. House marking during house-to-house survey for RI**

Interview each household and gather information on the head of household (Column B) and the total number of members in each household (Column C). This must include all newborn children.
Next, enquire if there is any currently pregnant woman in this household. This does not depend on if she is a resident / visitor to the area. Include all pregnant women as each is a beneficiary. If yes, then encircle yes (Column D) and collect information on the pregnant woman and enter in Form 4.

**Similarly for Columns F, G and H enquire if there is:**

- A newborn child
- A child up to 1 month of age
- A child between 1 month and 1 year of age
- A child between 1 and 2 years of age.

If a child is identified in any of these columns, encircle “Yes” and enter information on the newborn/infant/child in Form 5.
### VILLAGE/ AREA - Pregnant Women Survey Listing

#### RI Form 4

**Name of ANM:**

<table>
<thead>
<tr>
<th>Name No in Form 3</th>
<th>Name of the pregnant woman</th>
<th>Age in years</th>
<th>Husbands name</th>
<th>Mobile /Telephone Number</th>
<th>Is MCP card available:</th>
<th>Expected date of delivery/ LMP</th>
<th>Tetanus Toxoid Vaccination</th>
<th>Ante Natal Check Up</th>
<th>For ANM Only</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td>H</td>
<td>I</td>
<td>J</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Tetanus Toxoid Vaccination**

- **TT-1**
- **TT-2**
- **TT-booster**
  - If 2 doses of TT have been given within 3 years of the current pregnancy

**Ante Natal Check Up**

- 1st ANC
- 2nd ANC
- 3rd ANC
- 4th ANC

**For ANM Only**

<table>
<thead>
<tr>
<th></th>
<th>Date/Y/N/DNK</th>
<th>Date/Y/N/DNK</th>
<th>Date/Y/N/DNK</th>
<th>Date</th>
<th>Date</th>
<th>Date</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Y / N</td>
<td>Y / N</td>
<td>Y / N</td>
<td>Y / N</td>
<td>Y / N</td>
<td>Y / N</td>
<td>Y / N</td>
</tr>
<tr>
<td></td>
<td>Y / N</td>
<td>Y / N</td>
<td>Y / N</td>
<td>Y / N</td>
<td>Y / N</td>
<td>Y / N</td>
<td>Y / N</td>
</tr>
<tr>
<td></td>
<td>Y / N</td>
<td>Y / N</td>
<td>Y / N</td>
<td>Y / N</td>
<td>Y / N</td>
<td>Y / N</td>
<td>Y / N</td>
</tr>
<tr>
<td></td>
<td>Y / N</td>
<td>Y / N</td>
<td>Y / N</td>
<td>Y / N</td>
<td>Y / N</td>
<td>Y / N</td>
<td>Y / N</td>
</tr>
<tr>
<td></td>
<td>Y / N</td>
<td>Y / N</td>
<td>Y / N</td>
<td>Y / N</td>
<td>Y / N</td>
<td>Y / N</td>
<td>Y / N</td>
</tr>
<tr>
<td></td>
<td>Y / N</td>
<td>Y / N</td>
<td>Y / N</td>
<td>Y / N</td>
<td>Y / N</td>
<td>Y / N</td>
<td>Y / N</td>
</tr>
<tr>
<td></td>
<td>Y / N</td>
<td>Y / N</td>
<td>Y / N</td>
<td>Y / N</td>
<td>Y / N</td>
<td>Y / N</td>
<td>Y / N</td>
</tr>
</tbody>
</table>

**TOTALS**

|                 | I | I | I | I | I | I | I |

**Signature of ASHA:** ____________________________

**Verified by ASHA Facilitator [Signature]:** ____________________________

**Verified by ANM [Signature]:** ____________________________
SOPs for using RI Form 4

Form 4 has to be filled when a pregnant woman is identified in Form 3 Column E.

The number in Column A must be the same as that used to identify the household in Form 3. This number is a unique number that will link the pregnant woman to the house details.

Columns B, C, D and E are for information which identifies the pregnant woman.

**Column F.** Enquire from the woman if she has been issued a mother and child protection (MCP) card and accordingly encircle Yes or No. If she does not have a card, then information should be shared with the ANM of the area to ensure that a card is issued to her during the next visit.

**Column G.** Determine the expected date of delivery (EDD) of the child. This can be sourced from the RI/MCP card if available or from the mother herself. If she is unaware, then determine the EDD as best as possible by assessing her date of last menstrual period (LMP). *(Surveyor can consult ANM who can refer to the EDD ready reckoner from RCH register/training manual).*

The administration of TT vaccine to PW as per the UIP schedule prevents maternal and neonatal tetanus; details of the same are to be entered in the three H Columns.

Antenatal check-ups help to identify a high-risk pregnancy and reduce chances of any complications. Details of these checks are to be entered in the four (I Columns).

**Column J.** this is for the ANM to enter if the woman is due for any ANC or TT vaccination. These two columns make it easier for the ANM to extract the information and develop the beneficiary due list for each RI session.

The dates of administration of TT injections and ANC check-ups should ideally be obtained from the RI/MCP card.
RI Form 5– list and details of infants / children identified

SOPs for using RI Form 5

This form collates all the information of infants/children identified during the house to house survey.

When filled correctly, this form provides information needed to develop the beneficiary list of infants/children of the area. Accurate information on the number of children and the vaccines that they are due for will help to identify which vaccines a child is to receive, and when.

<table>
<thead>
<tr>
<th>Name of ASHA/ AWW/ assessor:</th>
<th>Area Name and No. as per Form 1:</th>
</tr>
</thead>
<tbody>
<tr>
<td>House No as in Form 2</td>
<td>Name of the child</td>
</tr>
<tr>
<td>---------------</td>
<td>----------------</td>
</tr>
<tr>
<td>A</td>
<td>B</td>
</tr>
</tbody>
</table>

**Column A.** The number in Column A must be the same as that used to identify the household in Form 3. **If there is more than one child in a house, the same number will have to be entered for each of these children.**

**Columns B, C, D and E.** These columns are used to collect identification information of each child. Attempt to collect the latest mobile number from the parent/household.

**Column F -** Enquire if the infant/child has been issued an RI/MCP card. If not, information should be shared with the ANM of the area to ensure that a card is issued at the earliest.

**Column G.** This records detail of vaccines administered at birth. Dates are to be entered of when BCG, OPV birth dose and Hepatitis B (within 24 h) were administered.
**Column H.** Dates of administration of Penta 1, Rotavirus 1 (where applicable), PCV 1 (where applicable), fIPV 1 and OPV 1

**Column I.** Dates of administration of Penta 2, Rotavirus 2 (where applicable) and OPV 2

**Column J.** Dates of administration of Penta 3, Rotavirus 3 (where applicable), PCV 2 (where applicable), fIPV 2, and OPV 3

**Column K.** Enter the dates of administration of vaccines due between the age of 9 months and 1 year – MR first dose, Vitamin A, PCV Booster (where applicable) and JE (where applicable) vaccines

| Column H | Dates of administration of Penta 1, Rotavirus 1 (where applicable), PCV 1 (where applicable), fIPV 1 and OPV 1 |
| Column I | Dates of administration of Penta 2, Rotavirus 2 (where applicable) and OPV 2 |
| Column J | Dates of administration of Penta 3, Rotavirus 3 (where applicable), PCV 2 (where applicable), fIPV 2, and OPV 3 |
| Column K | Enter the dates of administration of vaccines due between the age of 9 months and 1 year – MR first dose, Vitamin A, PCV Booster (where applicable) and JE (where applicable) vaccines |

<table>
<thead>
<tr>
<th>Name of ANM:</th>
<th></th>
</tr>
</thead>
</table>

| Column L | Record whether the ASHA has received the incentive for the child who is fully immunized – encircle “Yes” or “No”. A child is to be considered as fully immunized if s/he has received all the due vaccines up to 1 year of age. |

| Column M | Dates of administration of vaccines due for a child between the ages of 1 and 2 years are to be entered in column M. This includes MR second dose, OPV booster dose and JE vaccine (where applicable). |

| Column N | Has ASHA received the incentive for the child who is completely immunized – encircle “Yes” or “No”. A child is to be considered as completely immunized if s/he has received all the due vaccines up to 2 years of age. |
Each ASHA/AWW/LW/surveyor submits Forms 3, 4 and 5 to the ANM after completing the area survey. Step 4 is to review and collate this information.

ANM should plan for this meeting and inform all participants of the venue, date and time at least 2–3 days in advance so that they attend the meeting with completed survey forms.

**Facilitator:** ANM/Sector MO  
**Participants:** ASHA/AWW/surveyor with ASHA facilitator, LHV/LS to attend if possible  

**Key activities to be conducted:**
- Area demarcation to be finalized on map
- Review and refine RI plans as per actual head counts & identification of any missed (migratory/settled) pocket in sub centre area
- Ensure functional tagging – areas tagged to existing RI sites should be practical
- Consolidation of Routine Immunization Microplan at sub centre – Form 6, 7, 8 & 9
- Develop mobilization plans
- Update the map of sub-centre/urban health centre showing:
  - All HRAs, villages with hamlets, urban areas with wards, sub wards & mohallas
  - All session sites and session days including Anganwadi centres
  - Distance from the ILR point and the mode of transport.
  - Landmarks as Panchayat Bhavan, school, roads etc.
  - Demarcate ASHA/mobilizer wise areas for social mobilization on map

**Preparations**

The Sector MO must review the plan of the ANM; timely oversight will ensure the development of effective RI microplans. MO should guide the ANM and extend support with visits and reviews.

**During the meeting**

ANM will review the information collected during the house to house survey in Forms 3, 4 and 5 with the ASHA/AWW/link workers/surveyor. A simple map of the SC can then be made from the information and experiences of the workers who have completed the survey. This map need not be to scale, but should include area demarcation for ASHA/AWW/mobilizers and other information as mentioned above.
As the actual head counts and areas are now available, review and refine the RI session plans to address the following issues:

- Are the number of sessions presently sufficient?
- Are all the areas covered?
- Are the migrants/HRAs identified? If so, are RI sessions being conducted for these mobile populations?

Session due list (Form 6) – With the information gathered in Form 4 and Form 5, it is now possible to correctly quantify the number of beneficiaries.

The role of the ANM is crucial in this meeting. The focus must be on three points – beneficiary list, area finalization and mapping. The ANM should remember that these tasks require investment in time and this meeting may take more than one day. RI Form 6 is the session due list and is best to be filled in Step 5 after finalization of the SC microplans. A draft may be prepared but in discussion with MO Planning by the Sectoral MO should take this into consideration to enable him to attend if possible.

Outputs expected

- Number of new areas identified
- Number of beneficiaries
- Consensus on listing of areas and HRA
- Consensus on demarcation of areas
- Formats collected after cross check and attestation
- Availability of maps.

List of documents after conduct of the SC meeting:

1. Completed RI Form 3 for each area
2. Completed RI Forms 4 and 5 – Beneficiary list – as per ASHA/areas identified
3. RI Form 7 – proposed sessions planning for SC
4. Map of the SC – Form 2 showing demarcation of areas for ANMs (if applicable), ASHAs and AWWs

An overview of RI Forms 6 to 11 used in the SC RI microplan is given in Fig. 3.12.
Roles and responsibilities

<table>
<thead>
<tr>
<th>Personnel</th>
<th>Activities to be performed</th>
<th>Supervisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sector MO</td>
<td>Monitor surveys, review forms in the field</td>
<td>MOIC, DIO</td>
</tr>
<tr>
<td></td>
<td>Oversee the meeting at SC where possible</td>
<td></td>
</tr>
<tr>
<td>ANM</td>
<td>Conduct the meeting at SC</td>
<td>MOIC, Sector MO</td>
</tr>
<tr>
<td></td>
<td>Finalize area listing and draft of plan for conducting RI sessions in the areas</td>
<td></td>
</tr>
<tr>
<td>ASHA</td>
<td>Contribute to final forms</td>
<td>SC ANM/ASHA facilitator</td>
</tr>
<tr>
<td>AWW</td>
<td>Contribute to final forms</td>
<td>SC ANM/LS</td>
</tr>
</tbody>
</table>

Fig. 3.12. Overview of Sub Centre RI Microplan – Forms 6 to 11

RI Form 6
- Per session due list
- Update after each RI session

RI Form 7
- Number of beneficiaries from actual head count
- Calculation of injection load
- Deciding number of RI sessions

RI Form 8
- RI session plan
- Deciding location of RI sessions
- Vaccine distribution plan

RI Form 9
- Per session estimation of vaccines and logistics

RI Form 10
- ANM workplan

RI Form 11
- Communication plan
<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>MCTS Registration No.</th>
<th>Name of Child / Pregnant Woman</th>
<th>Date Of Birth / Expected date of Delivery</th>
<th>Age</th>
<th>Sex M / F</th>
<th>Name of Father/Husband</th>
<th>Vaccines due in this session</th>
<th>Did the pregnant woman / child arrive today? (Yes/No)</th>
<th>Vaccines which were administered to pregnant woman / child (If not given mention reason)</th>
<th>Incentive money Rs. 100 will be payable to ASHA under Part C.5.A. for Full Immunization</th>
<th>Incentive money Rs. 50 will be payable to ASHA under Part C.5.B. for Complete Immunization</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td>H</td>
<td>I</td>
<td>J</td>
<td>K</td>
<td>L</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
<td>18</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**RI FORM 6 - Session beneficiary due list**

This form is to be filled after finalization of SC microplans with medical officer.

**RI SESSION DUE LIST**

<table>
<thead>
<tr>
<th>PHC: ________________________</th>
<th>Name of Sub-Centre: ____________________________</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name Session Site: __________</td>
<td>Block: ____________________________</td>
</tr>
<tr>
<td>Name &amp; No of ANM: ____________</td>
<td>Name &amp; No of ASHA: ___________________________</td>
</tr>
<tr>
<td>Name &amp; No of AWW: ____________</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>I</th>
<th>J</th>
<th>K</th>
<th>L</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Details of Pregnant Women / Children due for vaccination for RI session**

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Name of Child / Pregnant Woman</th>
<th>Date Of Birth / Expected date of Delivery</th>
<th>Age</th>
<th>Sex M / F</th>
<th>Name of Father/Husband</th>
<th>Vaccines due in this session</th>
<th>Did the pregnant woman / child arrive today? (Yes/No)</th>
<th>Vaccines which were administered to pregnant woman / child (If not given mention reason)</th>
<th>Incentive money Rs. 100 will be payable to ASHA under Part C.5.A. for Full Immunization</th>
<th>Incentive money Rs. 50 will be payable to ASHA under Part C.5.B. for Complete Immunization</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td>H</td>
<td>I</td>
<td>J</td>
<td>K</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
<td>18</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**After the RI session**

<table>
<thead>
<tr>
<th>RI Form 6</th>
<th>Out of Village</th>
<th>Sick</th>
<th>Refused</th>
<th>Vaccinated outside</th>
<th>Other</th>
<th>Have these beneficiaries been included in the next session?</th>
<th>Y/N</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>Y/N</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>Y/N</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
<td>18</td>
<td>Y/N</td>
<td></td>
</tr>
</tbody>
</table>

**Total amount received**

<table>
<thead>
<tr>
<th>Number of beneficiaries who did not attend</th>
<th>Out of Village</th>
<th>Sick</th>
<th>Refused</th>
<th>Vaccinated outside</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1/N</td>
<td>2/N</td>
<td>3/N</td>
<td>4/N</td>
<td>5/N</td>
</tr>
</tbody>
</table>

Signature of ANM: ____________________________
Signature of ASHA: ____________________________
Signature of AWW: ____________________________
SOPs for using RI Form 6

This form is the session due list. **It identifies the number of beneficiaries per session and the vaccines for which they are eligible during the RI session.** This is also the record of payment of ASHA incentives.

This format is to be prepared by the ANM with support of the ASHA/AWW/LW after the proposed microplan is approved by the medical officer.

This session due list will help the ASHA in mobilizing beneficiaries to the session/s. Use a calendar and share the dates of upcoming sessions with ASHA/AWW/LW in advance to allow for mobilization.

**Form 6 – Note**
- This is a session due list and incentive recording sheet
- To be filled after finalization of microplan with medical officer
- ANM to compile the session beneficiary due list from the information
- Where possible, the MCTS number of PW is to be entered

**Column A:** The serial number for each beneficiary is to be entered here.

**Column B:** MCTS registration number is to be entered where available. ANM can provide this information from her RCH register. This unique number will help track the beneficiaries for complete immunization.

**Column C:** Name of the child/pregnant woman identified for services during this session is entered here.

**Column D:** For children enter the date of birth and for PW the expected date of delivery, if known.

**Column E:** Enter the age of the child in months or age of pregnant woman in years and months.

**Column F:** Enter the sex of the child.

**Column G:** Enter the name of the father or husband for easy identification at the village level.

**Column H:** Enlist all the vaccines that the beneficiary is due for in the upcoming session.

**The following columns are to be filled at the end of the RI session:**

**Column I:** After the completion of the RI session, cross check that all beneficiaries had arrived, answer as Yes or No
**Column J:** Enter all the vaccines were received by the beneficiary during this session. If not received, mention reasons.

**Columns K and L:** These are to be filled as and when ASHA receives her payments.

**Presentation of this form**

This format is not to be used singly. Each sheet to be in triplicate (different colours) and numbered. ANMs should use carbon sheets while filling the form. It is recommended that a booklet containing enough sheets for one year be printed to enable continuous use of the information and developing of a realistic RI session due list.

**Maintaining the session due list after every RI session**

- Who are the children who were due for vaccination today but did not turn up?
- Why did they not turn up?
- Who are the children we did not list for today’s session?

It is essential that the left-out and drop-out children be identified. These children are at maximum risk as their immunization cover will not be complete and makes them susceptible to VPDs. Incomplete immunization contributes to child deaths under the age of 2 years.

Therefore, after each session the ANM, ASHA and AWW must review the children who have not come to the session. The reasons for not coming, once identified, must be addressed by the team. Seek support from local influencers/key persons to identify any children or beneficiaries before leaving the session site.

Enlist all children **who had not come** in for the session conducted, irrespective of the reason. After these names, enter the names of children **who will be due** for any vaccine in the next session. Share this list with the ASHA/AWW/LW so as to give them sufficient time to visit these houses and use all possible methods to convince the parents or ensure that the children are vaccinated at the fixed site at the PHC or in the next session.

As per the SC RI microplan, the ANM should remind the ASHA/AWW/LW on the next session date before leaving the session site.
<table>
<thead>
<tr>
<th>S.No</th>
<th>Name of Villages / Hamlets / Tolas / HRA</th>
<th>Total Population of Area (Total Column 1)</th>
<th>Beneficiary Targets</th>
<th>Type of Session - Fixed / outreach / mobile / tagged</th>
<th>Name of the mobilizer</th>
<th>Name &amp; Designation of Supervisor</th>
<th>Mobile no.</th>
<th>Monthly Injection Load</th>
<th>Type of area / terrain - plain / hilly / riverine</th>
<th>Monthly Target</th>
<th>Number of Sessions</th>
<th>Name and location of the Session site / sites</th>
<th>District:</th>
<th>Block/PHC/Urban Planning Unit:</th>
<th>SC/UHC:</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>J</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>K</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

# 1- Slums with migration; 2 - Nomads; 3 - Brick Kiln; 4 - Construction Site; 5 - Others (fisherman villages, riverine areas with shifting populations, etc.); 6 - Non migratory (settled population), hard to reach areas

Less than 25 injections: One session every alternate month; 25-50 injections: one session per month; more than 50 injections: two sessions per month as per need; For hard to reach areas or less than 1000 population, where not tagged, plan for sessions every quarter for a minimum of 4 sessions a year ; for a busy PHC/CHC/RH: plan daily sessions.
SOPs for using RI Form 7

Enter the serial number and name of the villages in Columns A and B, keeping the same order as in Form 1. New areas /identified missed areas should be entered towards the end with clear marking that this is a new area, using an asterisk (*).

Using Form 3 Column D, the individual areas actual population (from the survey) should be entered into Column C.

The information for Column D is of the annual target of PW in each area.

Annual target of PW = Number of PW identified in the area survey X 2

The information for Column E

Annual target of infants = actual number of infants identified during the area assessment.

Calculating annual and monthly target population

Beneficiaries in the UIP are the PW and the children of an area who are eligible for any vaccinations. The cardinal numbers of these beneficiaries is obtained by conducting the area and house to house survey. Once the survey is completed, these figures will be available from Form 3.

However, for calculation of the yearly and monthly number of beneficiaries it is necessary to do the following:

- For pregnant women:
  
  The survey will give the number of PW identified in an area at the time of conducting the survey.
  
  The annual target of PW = actual number of PW as per head count X 2

- For children:
  
  The house to house survey also identifies child beneficiaries. For the calculation of the annual target the actual number identified is considered.
  
  The annual target of children = actual number of children as per headcount

For columns F and G

Monthly target of PW = Annual target divided by 12

Monthly target of children = Annual target divided by 12
In column H
Enter the monthly injection load for each area.

Calculating injection load (only for determining the number of sessions)
This calculation is to be used only as a planning tool and not for estimation of vaccines or logistics.

Firstly, determine the total number of injections needed per beneficiary.
This gives a multiplying factor of **15 injections**.

- BCG – 1 injection
- DPT – 2 booster injection
- HiB containing Pentavalent – 3 injections
- fIPV – 2 injections
- MR Vaccine – 2 injections
- PCV – 3 injections (where applicable)
- TT – 2 injections (for pregnant women)

*For districts where JE is included* in the schedule add **2** to the above number, giving the multiplying factor of **17 injections**.

**Injection load** = Monthly target of children from **Column G** multiplied by the above factor

**Column I**
Based on the monthly injection load the number of RI sessions to be conducted for each village/area is to be entered as per the guideline below.

**Frequency of RI sessions depending on injection load** –
- 1 to 25 injections – 1 session every alternate month
- 26 to 50 injections – 1 session every month
- 51 to 100 injections - 2 sessions every month

For hard to reach areas or less than 1000 population, where not tagged, plan for sessions every quarter for a minimum of 4 sessions a year

**Column J** describes the location of the vaccination site. It is important that the exact location be entered, preferably with a landmark. This helps to collate the information and makes it easier to develop the overall plan for RI sessions under the SC area.

Mobilizers play an important role in mobilizing beneficiaries to the RI session site. The name of the mobilizer is to be entered into **Column K**.

**Column L**. Describes the type of terrain as this is a factor that contributes to determining
the number of sessions in the area and the method of vaccine delivery. The areas may be as follows:

- Plain – flat and accessible with no compromise in accessibility
- Hilly – hilly area
- Riverine – area divided by a river or rivulets making access difficult
- Inaccessible – hard to reach due to absence of roads or is approachable only by foot.

**Column M.** Describes the type of session. Sessions can be:

- **Fixed.** These sessions are held where vaccine storage is possible because of availability of ILR and deep freezer (DF), i.e. the sessions conducted at PHC/CHC
- **Outreach.** All sessions conducted where vaccine has to be taken by vaccine carrier
- **Mobile.** Sessions conducted using a vehicle which moves from site to site along with the immunization team and vaccine
- **Tagged.** Site/area which does not have a session but is linked to the nearest session site.

Ensuring “Same day, Same site, Same time” policy will help to increase community acceptance and in turn the utilization of services provided.
### Sub Centre/ UHC: Per Session Injection load and vaccine distribution plan

<table>
<thead>
<tr>
<th>S.No</th>
<th>Name and location of Session Site (Exact location)</th>
<th>Name of village/sub village area (Fahmi) or urban ward (if applicable)</th>
<th>Frequency of Sessions (Once a year/ twice a year)</th>
<th>Target for the session (Level 1 - Community, Level 2 - Sub-c-brand, Level 3 - District)</th>
<th>Per Session doses required for each vaccine &amp; vitamin A</th>
<th>Vaccine Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**RI Form B**

**RI Microplan Form 8 – Per session injection load and vaccine distribution plan**

- **District:**
- **Block/PHC (Urban Planning Unit):**
- **SC/HC:**
- **Name of Medical Officer:**
- **Mobile no.:**
- **Name of IO / IEC:**
- **Mobile no.:**
- **Name of AML:**
- **Mobile no.:**
- **Name of Supervisor:**
- **Designation:**
- **Mobile no.:**

**Columns to be filled after approval of proposed plan by Medical Officer**

- **Month 1:**
- **Month 2:**
- **Month 3:**

<table>
<thead>
<tr>
<th>Vaccine Distribution</th>
<th>Mode of Transport</th>
<th>Name of person responsible</th>
<th>Contact number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**Notes:**

1. **Home visits:**
- **A:**—Aid (To aid villages with limited access)
- **B:**—Brick Kiln
- **C:**—Construction Site
- **D:**—Others (Villages outside the urban area, less than 1000 population, etc.)
- **E:**—Non-migrant (settlement population), hard to reach areas

---

**Unit 3 : Microplanning for Immunization Services**

**Immunization Handbook for Medical Officers**

---

**64**
The form contains detailed information on each RI session site in the SC. It also contains details on frequency of sessions, the villages/areas covered or tagged with each site, the injection loads per antigen and the vaccine distribution plan for each session.

**SOPs for using RI Form 8**

In **Column A**, enter the serial number.

In **Column B**, this is the name of the RI session site.

**Enter each RI session site in a separate row.** It is important that the exact site location be entered. **This will give the exact planning of sessions for the SC on a single page.** If the site is located in an Anganwadi centre, also include the centre number and location. If the site is located in private premises, the house owner’s name should also be entered. Include a landmark where possible.

**Column C.** This contains the names of areas to which a RI session site provides services. Enter the names of the village/s or areas as per Form 1. For multiple areas, write the names separated by commas into this column.

E.g – Village XYZ

The frequency of sessions at this RI site is to be entered in Column D. It may be entered as:

- once in a quarter, i.e. once in three months
- once in two months
- twice a month
- daily.

**Column E and F.** The target of PW and infants per session is determined for each site. This is obtained from monthly targets in Form 7 Columns F and G. If the site caters to more than one area, add the targets. If there are two RI sites in a large village, then the monthly target is to be divided by 2.

Example – monthly target for each area from Form 7 columns F and G

Village XYZ has 3 PW & 5 infants and tola XYZ has 1 PW & 2 infants for RI site no 1. Thus for RI site 1 monthly target will be 4 PW & 7 infants.

Village XYZ has 8 PW & 12 infants with two RI sites 2 and 3

Thus for RI site 2 monthly target will be 4 PW & 6 infants and for RI site 3 also is 4 PW & 6 infants

**Note:** For fixed site use daily average of PW and children vaccinated (number vaccinated per month/30)
Columns G to Q. Injection load for each antigen is to be entered in Columns G to Q. Using the target from Columns E and F the individual antigen dose requirement can be calculated using the formula in the boxes.

Column R. The total injection load for each site is now available to enter into Column R. This is calculated by adding the number of beneficiaries in Columns G, H, I, K, L, M, N, O, P and Q. (Note that OPV, Rotavirus vaccine (where applicable) and Vit A should not be considered as injections.)

Columns S, T and U. These columns show the exact time of RI site functioning for the next 3 months.

Each column is for a month. The day is to be entered as follows:

- Days – Mon, Tue, Wed, Thu, Fri, Sat
- Weeks – 1 to 5

Columns Q, R and S. Columns Q, R and S show the exact time of RI site functioning in the next 3 months.

Each column is for a month. The day is to be entered as follows:

E.g. If the session is held in Month 2 on the fourth Wednesday, the entry will be “Wed 4” in Column S.

Each state can customise this format for their own RI days and immunization schedule.

Method of vaccine distribution to each site is to be entered in the three Columns V.

- Information on the mode of transport – two wheeler/three wheeler/four wheeler with its registration number, if possible
- Name of the person transporting the vaccine and his contact number are to be entered.
### RI Form 9 – Per Session estimation of Vaccine and logistics

<table>
<thead>
<tr>
<th>Site</th>
<th>Estimation of vaccine vials and logistics for each session (At least one vial of each vaccine in each session)</th>
<th>TO BE USED WITH FORMAT 8</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Columns:**
- **A:** Site
- **B:** Vaccine
- **C:** No. of Days
- **D:** No. of Sessions
- **E:** No. of Vials
- **F:** No. of Doses
- **G:** Dose per Session
- **H:** Total Dose
- **I:** Remarks

**Rows:**
- **1:** Nontoxic
- **2:** E.g.: A
- **3:** B
- **4:** C
- **5:** D
- **6:** E
- **7:** F
- **8:** G
- **9:** H
- **10:** I

**Notes:**
- This form should be filled with the help of Format 8.
- Vials and doses are rounded off to the nearest whole number.
- No. of Doses = No. of Vials x Dose per Session
- Total Dose = No. of Doses x No. of Sessions
SOPs for using RI Form 9

This format collates the exact requirement of vaccines and logistics (considering wastage) for each session site. This information is calculated using data from Form 8.

**Columns A and B** should be in the same order as in Form 8.

**Columns C through M**, These columns, provide the number of vials/units of vaccine required for each session site. For the calculations, use the information from columns mentioned from Form 8 for each session site. (Number of doses \( \times \) WMF) ÷ no. of doses per vial.

**Columns N, O and P** - Calculates the requirement of syringes including reconstitution syringes. Calculation is based on number of vials from **Columns C to M of this format**. Remember – only calculate reconstitution syringes for BCG, MR and JE.

In the format wastage factors are given in the row below the names of antigens.

**Columns Q to V are to indicate the requirement of other logistics for each session site.**

**Wastage multiplication factor (WMF)**–

This is for use in estimation of vaccine and logistics. It is calculated using the following equation:

\[
\frac{100}{100-(\text{wastage } \%)}
\]

E.g. if wastage is 15 %,

\[
\frac{100}{100-15} = \frac{100}{85} = 1.18
\]

### Permissible wastage percentage

<table>
<thead>
<tr>
<th>Antigen</th>
<th>Number of doses</th>
<th>Permissible wast-</th>
<th>WMF</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of doses</td>
<td>age %</td>
<td></td>
</tr>
<tr>
<td>Hep B</td>
<td>1</td>
<td>10</td>
<td>1.11</td>
</tr>
<tr>
<td>BCG</td>
<td>1</td>
<td>50</td>
<td>2</td>
</tr>
<tr>
<td>DPT</td>
<td>2 booster</td>
<td>10</td>
<td>1.11</td>
</tr>
<tr>
<td>OPV</td>
<td>3+2 booster</td>
<td>10</td>
<td>1.11</td>
</tr>
<tr>
<td>Rotavirus</td>
<td>3</td>
<td>25</td>
<td>1.33</td>
</tr>
<tr>
<td>IPV</td>
<td>1</td>
<td>10</td>
<td>1.11</td>
</tr>
<tr>
<td>Pentavalent</td>
<td>3</td>
<td>10</td>
<td>1.11</td>
</tr>
<tr>
<td>MR</td>
<td>2</td>
<td>25</td>
<td>1.33</td>
</tr>
<tr>
<td>PCV</td>
<td>3</td>
<td>10</td>
<td>1.11</td>
</tr>
<tr>
<td>TT</td>
<td>2</td>
<td>10</td>
<td>1.11</td>
</tr>
<tr>
<td>JE</td>
<td>2</td>
<td>25</td>
<td>1.33</td>
</tr>
<tr>
<td>Syringes</td>
<td>As per requirement</td>
<td>10</td>
<td>1.11</td>
</tr>
</tbody>
</table>
RIMP – Form 10 - ANM work plan

This form is used by each ANM to plan her movement for the next 3 months. The day columns may be customized for each state or district. Entry of the name of the site and time is to be made against each month.

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Saturday</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sub Centre - ANM’s Workplan

<table>
<thead>
<tr>
<th>Month</th>
<th>Week 1</th>
<th>Week 2</th>
<th>Week 3</th>
<th>Week 4</th>
<th>Week 5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

RIM I Form 10

Signature of ANM_______________________ Verified by Medical Officer (Signature):____________________________
<table>
<thead>
<tr>
<th>Name of Block: ____________________</th>
<th>Name of ANM: ____________________</th>
<th>Name of Subcentre: ____________________</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name of Village</strong></td>
<td><strong>Name of Session site</strong> 1- 2- 3- 4- 5- 6-</td>
<td></td>
</tr>
<tr>
<td><strong>Activities</strong></td>
<td><strong>Activities</strong></td>
<td><strong>Activities</strong></td>
</tr>
<tr>
<td>Miking / drum beating: Name and contact number</td>
<td>Mosque announcement: Contact person and number - announcement time</td>
<td>Meetings (Mothers meeting, AWW meeting, etc): Contact person and number - Monthly / weekly</td>
</tr>
<tr>
<td>VHSC meeting: contact person and number - location - attended by ANM Monthly / weekly</td>
<td>School Rallies: school name and contact person with number (once a month in villages on)</td>
<td>Celebrations / Special Days (e.g., Mothers day, health day etc): contact person and number</td>
</tr>
<tr>
<td>Wall paintings: locations</td>
<td>Banners: identify 4 key locations - Ensure display at least one day before RI day</td>
<td>Painting competition / Exhibition: (once a quarter - school name and contact person with number)</td>
</tr>
<tr>
<td>Posters: identify 5 key locations (other than Panchayat ghar, Ration store, AWW centre, Sub centre, Bus stand) - ensure display at least 2 days before RI day</td>
<td>Pamphlets / Leaflets: available with - contact person name and number - distribute before RI session day</td>
<td>Counselling aids / job aids (flip books etc.) - available with - contact person name and number</td>
</tr>
<tr>
<td>Other</td>
<td>Other</td>
<td>Other</td>
</tr>
<tr>
<td>Name of ASHA</td>
<td>Name of ASHA</td>
<td>Name of ASHA</td>
</tr>
<tr>
<td>Name of AWW</td>
<td>Name of AWW</td>
<td>Name of AWW</td>
</tr>
<tr>
<td>Name of Mobilizer / CMC</td>
<td>Name of Mobilizer / CMC</td>
<td>Name of Mobilizer / CMC</td>
</tr>
<tr>
<td>Name of community influencer</td>
<td>Name of community influencer</td>
<td>Name of community influencer</td>
</tr>
<tr>
<td>Name of PRI member</td>
<td>Name of PRI member</td>
<td>Name of PRI member</td>
</tr>
<tr>
<td>Date: __________</td>
<td>Sign of ANM: ____________________</td>
<td>Sign of MO: ____________________</td>
</tr>
</tbody>
</table>
**SOPs for using RI Form 11**

**Form 11 is the communication plan for a SC.**

Information to be filled for up to 6 session sites under a SC. Multiple formats may be used if needed.

A number of activities have been identified; the medical officer should guide the ANM to identify the activities that can be conducted in her areas. It is important to firstly identify the contact person who will coordinate the activity such as a school principal or community leader. Meetings such as **VHSC, Mothers meetings, AWW meetings** are generally held regularly and the tentative dates should be entered in the columns. Follow up on the dates by ANM and if possible the medical officer can support the visits or include them in MO plan.

**With IEC material (Posters / banners)** the common issue remains who and where the IEC is to be displayed. When reviewing the SC RI microplan discuss the locations appropriateness with ANM and enter the locations in the columns. MO can suggest changes when visiting the area or during subsequent meetings.

**Painting competitions / exhibitions** require some planning but have a positive impact on the community. Encourage the conduction of such activities.

**Pamphlets / leaflets / counseling aids** are material that can be placed at the AWC or other locations and used during RI sessions / other meetings.

Having the **names and contact numbers** of frontline workers of each centre will help the ANM to contact them in advance of RI session days. PRI / Community influencers can play a key role in RI and it is essential to identify them in a village or ward area.
The final step in the RI microplanning exercise at the PHC comprises of two components:

- **Component 1** - Review and finalization of the newly updated/proposed SC RI microplans and finalization of formats and session due lists
- **Component 2** - Development of the final block PHC/UHC RI microplan.

**First component:** Review of the updated/proposed RI plans

This meeting is to be conducted on the same lines as the first meeting as demonstrated in step 1. The outputs are now focused on the finalization of SC microplans and the development of the PHC microplan. Each ANM should present her sub centre microplans focusing on the following points:

1. Total number of areas identified – any increase or decrease? Form 1
2. Total number of HRAs identified – any increase or decrease? Form 1
3. Demarcation of areas – who will be looking after which area? Form 1 and 2
4. Number of RI sessions planned? Form 7 and 8
5. Are the maps updated? RI Form 2
6. Is sub centre RI microplan now complete?

Each ANM after finalization of the information, plans and forms should compile the information for her SC. Sector medical officers should review the information for their respective areas. After review the MO should approve the ANMs microplans including the number of sessions and the sites.

The ANM can now develop the RI session due lists (Form 6) as per the RI sessions.

Plans from all sub centre are required including those which are vacant and those where ANM is on leave. It is advisable to review 2 to 3 ANMs per day to allow for other activities and maintain quality.

**The second component** - development of the PHC plan comprises of forms 12 to 18 as enlisted in figure 3.13. Form 12 is made by collating information from individual sub centre plans (RI form 7 and 8). Remember to include the fixed site session at PHC/Block.

**Facilitator:** MOIC

**Participants:** Sector MO, ANM, LHV, Health supervisors
Minimum activities at the final PHC meeting

- Review and finalization of SC plans for
  - inclusion of all HRAs
  - special plans for difficult areas
  - adequate deployment of mobilizers
  - adequate session planning
- Compile plans from all SCs to develop block plan
- Prepare vaccine delivery and supervision plan
- Recalculate vaccine and logistics requirement.

Remember

- Every 6 months—Update the available list of all the HRAs in the block/urban area
- During visits to RI sessions—review existing beneficiary and mobilization lists
- Prioritize block/s having large number of HRAs
- Review monitoring reports and data to identify issues
- Facilitate block level review and revision under guidance of DIO in priority blocks
- Follow-up the progress during weekly and monthly PHC meetings

Outputs expected

Availability of the following documents after Step 5:

- Forms 6, 7, 8, 9, 10 and 11 for each SC
- Forms 12 to 18 for the PHC

Roles and responsibilities

<table>
<thead>
<tr>
<th>Personnel</th>
<th>Activities to be performed</th>
<th>Supervisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOIC</td>
<td>Coordination of the activity/reviewing each SC plan</td>
<td>DIO</td>
</tr>
<tr>
<td>Sector MO</td>
<td>Oversee/review the microplans submitted by ANMs</td>
<td>MOIC</td>
</tr>
<tr>
<td>Data manager</td>
<td>Clarify and finalize the names of villages. Data entry for generation of RIMP</td>
<td>MOIC</td>
</tr>
<tr>
<td>ANM</td>
<td>Generate SC forms and suggest changes to the reviewing officer</td>
<td>Sector MO</td>
</tr>
</tbody>
</table>
Preparation of a block/PHC/urban planning format

At a PHC or UHC, Seven formats provide overview of a PHC’s RI session planning.

Fig. 3.13. Overview of PHC RI Microplan – Forms 12 to 18

RI Form 12
Block/PHC/UHC - SC workload and sessions plan

RI Form 13
PHC vaccine delivery plan

RI Form 14
PHC vaccine and logistics

RI Form 15
MO supervision plan

RI Form 16
Emergency plan for vaccine storage

RI Form 17
Bio-medical waste management plan

RI Form 18
PHC communication plan

RI form 12 – Block workload and sessions plan per Sub Centre

This format is a one page listing of the SCs and the details of the number of beneficiaries, injection load, number of sessions and HRAs. This information is a collation of totals of Form 8 of each SC. It gives the workload per SC and the details of number of sessions for the PHC.

For fixed sites – at PHC/CHC/UHC – Remember to include as a separate row entry. To determine injection load of the fixed session, use monthly average from tally sheets / register. In very busy centres daily sessions may be held. In form 12 write “Not Applicable” in the columns for information that is not relevant for fixed site.
## BLOCK / PHC - Population and injection load

**RIMP - FORM 10**

### BLOCK / PHC / UHC - Subcentre workload and Sessions plan

**District:** ____________________________  **Block/PHC/Urban Planning Unit:** __________________

**Name of IO / ICC:** _____________________  **Mobile no.:** _____________  **Name of Medical Officer I/C:** _____________  **Mobile no.:** _____________

### Estimation of beneficiaries

<table>
<thead>
<tr>
<th>S.No</th>
<th>Name of Sub Centre</th>
<th>Total Population</th>
<th>Annual Target (Based on actual headcount by ASHA / AWW / ANM etc.)</th>
<th>Monthly Target</th>
<th>Monthly Injection Load</th>
<th>Number of Session Sites</th>
<th>Number of sessions per month</th>
<th>Number of polio HRAs</th>
<th>Name of ANM</th>
<th>Contact No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### PW Infants

<table>
<thead>
<tr>
<th>S.No</th>
<th>PW</th>
<th>Infants</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A</td>
<td>B</td>
</tr>
<tr>
<td>2</td>
<td>C</td>
<td>D</td>
</tr>
</tbody>
</table>

### Monthly Target

<table>
<thead>
<tr>
<th>PW</th>
<th>Infants</th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
<td>F</td>
</tr>
<tr>
<td>G</td>
<td>H</td>
</tr>
<tr>
<td>I</td>
<td>J</td>
</tr>
</tbody>
</table>

### Monthly Injection Load

<table>
<thead>
<tr>
<th>PW</th>
<th>Infants</th>
</tr>
</thead>
<tbody>
<tr>
<td>a/12</td>
<td>b/12</td>
</tr>
</tbody>
</table>

### TOTAL

| Signature of Nodal Medical Officer - Immunisation - ________________ | Signature of Medical Officer I/C: ________________ |
Vaccine Delivery System refers to the independent person who delivers the vaccine carrier from the PHC to the session site. The ANM has to directly reach the session site in order to maximize the use of her time. It helps to start the session on time, and the HW does not have to come to PHC to collect or return vaccine and other logistics to the PHC at the end of the session. Prepare the AVD plan and route chart for alternate vaccine (and logistics) delivery (AVD) to the session sites from the nearest cold chain storage point for each session day.

<table>
<thead>
<tr>
<th>Site 1</th>
<th>Site 2</th>
<th>Site 3</th>
<th>Site 4</th>
<th>Site 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
</tr>
</tbody>
</table>
### RI Form 14 - Block / PHC Monthly requirement of vaccines and logistics

This format provides a single sheet to view the requirement of vaccines and logistics for the entire PHC.

<table>
<thead>
<tr>
<th>Serum</th>
<th>Estimated requirements</th>
<th>Estimated requirement for each Subcenter</th>
<th>Monthly</th>
<th>Weekly</th>
<th>Monthly</th>
<th>Weekly</th>
<th>Weekly</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CL1</td>
<td>CL1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>CL2</td>
<td>CL2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>CL3</td>
<td>CL3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>CL4</td>
<td>CL4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>CL5</td>
<td>CL5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>CL6</td>
<td>CL6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>CL7</td>
<td>CL7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>CL8</td>
<td>CL8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>CL9</td>
<td>CL9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>CL10</td>
<td>CL10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source figures from column totals from CBM 5

**Verification**

Signed by Medical Officer (MO)
RI Form 15 - Block medical officer supervision plan

Prepare the supervision plan for a quarter at the Block/PHC/Urban planning unit level.

<table>
<thead>
<tr>
<th>Month</th>
<th>Week 1</th>
<th>Week 2</th>
<th>Week 3</th>
<th>Week 4</th>
<th>Week 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuesday</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wednesday</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thursday</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friday</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Saturday</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

District: ___________________________ Block/PHC/Urban Planning Unit: __________________
Name & Mobile no. of Medical Officer I/C: __________________________________
Name & Mobile no. of IO / ICC: ______________________________

Signature of Medical Officer_______________________
Verified by Medical Officer (Signature):____________________________
RI Form 16 - Emergency plan for vaccine storage

At your PHC/Urban Planning Unit, prepare a plan for safely storing vaccines during equipment breakdown or electricity failure and display in the cold chain room.

**EMERGENCY PLAN FOR VACCINE STORAGE**

| PHC / UHC: ___________________________ | Date: _/__/____ |
|---------------------------------------------------------------|

**When to act:** ILR/Deep Freezer breaks down OR Electricity failure for more than 18 hours

**Who will act:** Name and number of Cold Chain Handler/s:__________________________

**What to do (Recommended actions):**

- 1-Shift vaccines in cold boxes with conditioned icepacks. Place thermometer inside the cold box.
- 2- Arrange shifting of vaccines to nearby PHC or other vaccine storage facility.
- 3-Contact DISTRICT FOCAL POINT for arranging cold chain space and arrange shifting.

**Deep Freezer:**

- 1. Shift ice packs into cold boxes, if extra cold box is available after shifting of vaccines from the ILR.
- 2. Contact ice factory: ________, Mr ________ to freeze ice packs.

**In case of ILR/DF breakdown, IMMEDIATELY INFORM:**

<table>
<thead>
<tr>
<th>Designation</th>
<th>Name</th>
<th>Contact no</th>
<th>E-mail</th>
<th>Alternate contact no</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Officer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIO</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>District CC mechanic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>State Cold chain Officer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Company direct:**

Record details of breakdown in inventory register, UIP monthly PHC performance report, NCCMIS

**Signature of Medical Officer**

**Signature of Cold Chain Handler**

---

**BIO-MEDICAL WASTE MANAGEMENT PLAN**

| PHC / UHC: ___________________________ | Date: _/__/____ |
|---------------------------------------------------------------|

**Name of the outsourcing agency:** ____________________________

**Name and contact number of agency supervisor:**__________________________

**Name and contact number of agency waste collection person:**

At PHC/Urban planning unit:

**Name and contact number of nodal medical officer:**__________________________

**Name and contact number of coordination personnel:**__________________________

**Name and contact number of ANM coordinator:**__________________________

**BMW mechanisms at unit**

<table>
<thead>
<tr>
<th>Identified RI session sharps recovery point</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y/N</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>identified Disinfection corner/point</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y/N</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sharps pit location</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y/N</td>
<td></td>
</tr>
</tbody>
</table>

**Availability of IEC material on BMW:**

<table>
<thead>
<tr>
<th>Location</th>
<th>Y/N</th>
<th>EMERGENCY Contact:</th>
</tr>
</thead>
<tbody>
<tr>
<td>@ OPD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>@ Injection Room</td>
<td>Y/N</td>
<td>1</td>
</tr>
<tr>
<td>@ OT (Minor / Major / Labour)</td>
<td>Y/N</td>
<td>2</td>
</tr>
<tr>
<td>@ lab (Liquid waste management)</td>
<td>Y/N</td>
<td>3</td>
</tr>
<tr>
<td>@</td>
<td>Y/N</td>
<td></td>
</tr>
<tr>
<td>@</td>
<td>Y/N</td>
<td></td>
</tr>
</tbody>
</table>

**Signature MO/IC:** ____________________________

**Signature Nodal Officer:** ____________________________
### RI Form 18 – Communication plan for PHC/UHC

<table>
<thead>
<tr>
<th>Name of Block: ________________</th>
<th>Quarter: 1 / 2 / 3 / 4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Activities</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Meetings with Block Panchayat / BDO</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Local Press agency / journalist- Names and contact numbers</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Meetings with NGO/Community groups/institutions</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td></td>
</tr>
</tbody>
</table>

**IEC material and display plan**

<table>
<thead>
<tr>
<th>Items</th>
<th>Received on: <strong>/</strong>/____</th>
<th>Quantity: __</th>
<th>dispatched for display on: <strong>/</strong>/____</th>
<th>to:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banners</td>
<td>Received on: <strong>/</strong>/____</td>
<td>Quantity: __</td>
<td>on: <strong>/</strong>/____</td>
<td>to:</td>
</tr>
<tr>
<td>Posters</td>
<td>Received on: <strong>/</strong>/____</td>
<td>Quantity: __</td>
<td>on: <strong>/</strong>/____</td>
<td>to:</td>
</tr>
<tr>
<td>Pamphlets / Leaflets</td>
<td>Received on: <strong>/</strong>/____</td>
<td>Quantity: __</td>
<td>on: <strong>/</strong>/____</td>
<td>to:</td>
</tr>
<tr>
<td>Counselling aids / job aids (flip books etc..) - available with - contact person name and number</td>
<td>Received on: <strong>/</strong>/____</td>
<td>Quantity: __</td>
<td>on: <strong>/</strong>/____</td>
<td>to:</td>
</tr>
<tr>
<td>Other</td>
<td>Received on: <strong>/</strong>/____</td>
<td>Quantity: __</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Name & contact number of PRI Chairman
Name & contact number of BDO
Name & contact number of BEO
Date: ________________  Signature of MO: ______________________________
This communication plan has been designed with the objective of collating the information necessary at a PHC level to give an overview of the opportunities available to the MO and staff to enhance immunization coverage. The plan can be made for each quarter with tentative dates. At times it may not be possible to give exact dates however it may be possible to identify a person or time when the dates could be confirmed.

**Activities:** the sub headings are indicative and medical officers are encouraged to identify any other meetings that could be utilized for vaccination advocacy or enhance community support for RI.

**Meetings with Block Panchayat/BDO** – the PRI is an important part of RI strengthening and their meetings are held regularly. Interactions with the BDO are essential as they are involved in community development and directly interact with community leaders.

**Local press agency / journalist** – this list will be useful to disseminate information through channels of mass media. They can also be of help during emergencies or any AEFI. Discuss with the CMO/DHO/DIO to ensure clear messages.

**Meetings with NGO/community groups/institutions** - wherever possible engage with organizations working with communities or NGOs or institutions such as colleges, medical colleges, industries in the area for support for RI.

**Other** – any other organizations or meetings

**IEC material and display plan**

**Hoardings** – identify points for display of hoardings and or banners – list main areas such as bus stops, market places or prominent locations.

**Banners** – enter the number and date of receipt of any banners and who will be responsible to ensure timely display. If banners are distributed to SC ensure entry of the same in Form 11 of each ANM.

**Posters** – enter the number and date of receipt of any banners and who will be responsible to ensure timely display.

**Pamphlets / leaflets** – same as above

**Counselling aids / job aids etc.** Enter the number and date of receipt and ensure distribution at the earliest.

**Other** – refers to other IEC material such as polio posters or other campaign posters.

**Contact numbers of PRI Chairman, BDO and BEO** - ensure numbers are up to date.
### Table 3.7 Checklist for RI microplan components – all levels

<table>
<thead>
<tr>
<th>Level</th>
<th>Components of Routine Immunization Microplan</th>
<th>Available</th>
</tr>
</thead>
</table>
| **Sub-centre**         | Map of area -with name of village, urban area including all hamlets (tola), sub-villages, sub-wards, sector, mohallas, hard to reach areas, etc.  
Demarcation Map - This map allocates areas for each ANM if more than 2 ANMs are present in a SC. It can also show the exact boundaries and areas for ASHA and AWW.  
Master list which includes all villages/areas/HRAs  
Estimation of beneficiaries and injection load per area  
Estimation of beneficiaries and injection load per HRA  
Estimation of beneficiaries, injection load and mobilizers per RI session site  
Estimation of vaccines and logistics  
ANM work plan including mobilization plan  
General information sheet  
Beneficiary list - PW and children aged 0-2 years  
Session due list  
Vaccine coverage chart | Yes | No |
| **PHC/Urban planning unit plan** | Map of PHC showing SCs area demarcation  
Master list of all areas  
RI microplans from each SC  
Vaccine delivery plan and route chart  
Vaccine and logistics estimation per SC  
Vaccine and logistics for entire PHC  
MO Supervision plan  
Cold chain contingency plan  
Bio Medical Waste management plan  
IEC and social mobilization plan  
Training plan (if applicable)  
Latest coverage chart | Yes | No |
| **District plan**      | Map of district showing blocks/PHCs in district  
Compiled RI microplans from all PHCs  
Supervision plan of district officials  
Latest coverage chart for district  
Vaccine and logistics estimation per block  
Timeline for RI microplan update/beneficiary estimation  
IEC and social mobilization plan  
Training plan | Yes | No |