



# Periodic Intensification of ROUTINE IMMUNIZATION

PRE-PRINT RELEASE

LESSONS LEARNED AND IMPLICATIONS FOR ACTION



**Cover photos courtesy:**

Top Left: *UNICEF*

Top Right: *UNICEF/EI Salvador/Gonzalo Bell*

Bottom Left: *WHO*

Bottom Right: *AED/Berengere DeNegri*

# Periodic Intensification of ROUTINE IMMUNIZATION

LESSONS LEARNED AND IMPLICATIONS FOR ACTION



**The Department of Immunization, Vaccines and Biologicals  
thanks the donors whose unspecified financial support  
has made the production of this document possible.**

This document was produced by the IMMUNIZATIONbasics Project, funded by the  
U.S. Agency for International Development (Cooperative Agreement #GHS-A-00-04-00004-00)  
and the Expanded Programme on Immunization team of the  
Department of Immunization, Vaccines and Biologicals

*Ordering code: WHO/IVB/\_\_\_\_*

*Printed: \_\_\_\_ 2009*

**This publication is available on the Internet at:**

[www.who.int/vaccines-documents/](http://www.who.int/vaccines-documents/)

[www.immunizationbasics.jsi.com](http://www.immunizationbasics.jsi.com)

**Copies of this document as well as additional materials on  
immunization, vaccines and biologicals may be requested from:**

World Health Organization

Department of Immunization, Vaccines and Biologicals

CH-1211 Geneva 27, Switzerland

• *Fax:* + 41 22 791 4227 • *Email:* [vaccines@who.int](mailto:vaccines@who.int) •

© World Health Organization 2009

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

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by the World Health Organization in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

All reasonable precautions have been taken by the World Health Organization to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall the World Health Organization be liable for damages arising from its use.

The named authors alone are responsible for the views expressed in this publication.

**Printed by the WHO Document Production Services, Geneva, Switzerland**

---

## TABLE OF CONTENTS

Acronyms	2
Executive Summary	3
1. Background and Purpose of Document	6
2. PIRI – Characteristics and Categories of Experiences	7
3. Experiences, Lessons Learned, and Implications for Action	12
3.1 Decision-making, Goals, Objectives, Choice of Interventions	12
3.2 Planning, Budgeting, Coordination	16
3.3 Processes to Record and Report Achievements	20
3.4 Supplies and Logistics Management	23
3.5 Training, Orientation, and Human Resource Issues	25
3.6 Communication, Social Mobilization, and Community Engagement	29
4. Using PIRI as an Opportunity to Strengthen Routine Immunization	32
5. Conclusions	34

---



## ACRONYMS

<b>CHD</b>	Child Health Day
<b>CHW</b>	Child Health Week
<b>cMYP</b>	comprehensive multi-year plan
<b>DTP</b>	Diphtheria, pertussis, tetanus vaccine
<b>EPI</b>	Expanded Program on Immunization
<b>EIW</b>	European Immunization Week
<b>GIVS</b>	Global Immunization Vision and Strategy
<b>ICC</b>	Interagency Coordinating Committee
<b>IEC</b>	Information, Education, and Communication
<b>IPDs</b>	Immunization Plus Days
<b>IPTp</b>	Intermittent prophylactic treatment in pregnant women
<b>ITN</b>	Insecticide-treated net
<b>MNT</b>	Maternal and neonatal tetanus
<b>NGO</b>	Nongovernmental organization
<b>NID</b>	National Immunization Day
<b>PIRI</b>	Periodic Intensification of Routine Immunization
<b>RED</b>	Reaching Every District
<b>SIA</b>	Supplementary Immunization Activity
<b>SNID</b>	Subnational Immunization Day
<b>TOT</b>	Training of trainers
<b>TT</b>	Tetanus toxoid
<b>UNICEF</b>	United Nations Children's Fund
<b>VWA</b>	Vaccination Week in the Americas
<b>WHO</b>	World Health Organization

## EXECUTIVE SUMMARY

In recent years, countries have employed a growing range of strategies to increase both the provision and utilization of immunization services. These experiences are consonant with the Global Immunization Vision and Strategy (GIVS) of “using a combination of approaches to reach everyone targeted for immunization.” In over 100 countries, activities have been conducted that demonstrate the characteristics of vaccination campaigns while promoting the goal of raising routine immunization coverage. This stands in contrast with the vaccination campaigns that predominated during the 1990s and first half of this decade, with their goals of supporting accelerated disease control initiatives. The more recent campaign-style activities effectively blur the old boundaries between routine immunization and campaigns. For the purposes of this paper, the term used for this category of activity is “periodic intensification of routine immunization” or PIRI.

Despite the proliferation of PIRI activities, there has been little systematic documentation of their basic characteristics, effectiveness, or common problems. Yet such information would be useful to share to improve the effectiveness and efficiency of planning and implementing these activities. This experience could also help to institutionalize PIRI as an activity that can be planned and budgeted as a standard, strategic component of annual immunization plans of action and comprehensive multi-year plans.

This paper surveys a wide array of PIRI experiences, drawing on the fragmented documentation that exists at this time. It is based on a desk review of planning documents, guidelines, website information, data on the accomplishments of these campaigns (where available) and other gray literature, plus interviews and email communication with individuals from several countries where PIRI activities have been conducted. Gathering of this information was facilitated by an initial communication from WHO/IVB in Geneva to regional immunization advisors in 2006.

Because this paper is not an evaluation and is not based on case studies, it cannot provide in-depth analyses of causes of important problems or provide step-by-step solutions. Rather, it provides a snapshot of the range of activities and experiences across countries, describes common features and issues, and provides some practical suggestions for country planners to consider.

## COMMON FEATURES

In broad terms, PIRI activities fall into two categories:

### **1) SERVICE DELIVERY TOGETHER WITH INFORMATION, EDUCATION, COMMUNICATION (IEC) AND SOCIAL MOBILIZATION:**

These events provide immunization either alone or with other child health interventions. Typically they take place in low-resource environments with limited health infrastructure and routine immunization coverage under 80%. They are instigated jointly by immunization, nutrition, malaria, and other health programs as a means of rapidly providing a few selected services or commodities to the entire population.

## **2) IEC/SOCIAL MOBILIZATION WITH ONLY SELECTIVE SERVICE DELIVERY:**

Examples include Vaccination Week in the Americas and European Immunization Week, which are conducted in countries where routine immunization coverage is generally quite high and the health infrastructure is strong, but certain pockets of the population remain underserved. In these activities, a major goal is to generate and solidify support for immunization among parents, community groups, clinicians, media, and community/political leaders. Vaccination Week in the Americas has also used the opportunity of high visibility and additional human resources to accelerate routine immunization among difficult-to-reach and cross-border populations and provide specific vaccination activities, e.g., introducing a new vaccine.

**SETTING OBJECTIVES, PLANNING, AND BUDGETING.** In countries where PIRI has a strong service delivery component, the health interventions most commonly provided are decided at national level (without in-country variation) and include immunization, vitamin A, de-worming, distribution of insecticide-treated nets, and iron folate tablet distribution. These share common characteristics: they are largely preventive, are well-accepted by most communities, and can be quickly administered or given to large groups of people with minimal counseling. Generally, only a few interventions are provided on the same day; more than that results in an excessive burden on health personnel and volunteers. Targets for immunization are usually described in terms of the event rather than in terms of their expected contribution to annual routine coverage. A planning horizon of at least six months is needed to assure an effective outcome and reduce disruptions to ongoing health services, including routine immunization. Whereas it is common to see budgets determined by the national level with considerable donor input, some countries have institutionalized the budgeting and planning out to the district level. The budget for certain areas, including stakeholder engagement and reaching the hard-to-reach, are commonly underestimated.

**RECORDING AND REPORTING DOSES ADMINISTERED.** The inaccuracy of recording is a widespread problem, hampered by the high volume of activity, increased number of service delivery points, multiple interventions, low priority, and non-use of child health cards during the PIRI activity. Several factors favor the overestimation of doses administered during the PIRI activity and this may carry forward, resulting in overestimates of routine immunization coverage for the year. Experience from many countries suggests that recording and reporting need greater attention prior to, during, and following the PIRI event.

**MANAGEMENT OF SUPPLIES AND LOGISTICS.** As with any campaign, common problems with supplies and logistics management are exacerbated during a PIRI activity. The addition of other health commodities, the greater number of service delivery points, and the often-short timeframe for planning are factors that complicate the management of commodities. At the same time, planning for a PIRI event can be used as an impetus to update inventories of vaccines, cold chain equipment, cold boxes, and auto-disable (AD) syringes and safety boxes. Injection safety and sharps waste management require additional attention during and following PIRI activities.



**TRAINING AND HUMAN RESOURCES.** The uneven experience with using cascade training to train large numbers of health workers and volunteers suggests that other training strategies should be employed, if possible. Large and varied cadres of volunteers, including, for example, retired nurses or medical students, can be enlisted to support PIRI activities. But sufficient financial and human resources must be made available to support them. In particular, easy-to-use job aids and frequent supervision are needed by health workers and volunteers during the course of the PIRI activity.

**COMMUNICATION AND SOCIAL MOBILIZATION.** PIRI events enjoy high visibility and financial support is often forthcoming from governments and donors. Messages disseminated during the PIRI event should encourage communities to seek routine immunization services both during the event and afterward. The additional resources that may be available during PIRI activities have been used effectively in some countries to identify the needs and characteristics of underserved populations. These findings can be used to design effective service delivery strategies for the PIRI activity and for routine immunization.

The findings presented here are based on limited evidence and descriptive information. More work is needed to identify additional countries where PIRI activities have taken place and the nature of those experiences. Equally important, more in-depth analysis is needed in a sample of countries to clarify the root causes of common problems so that workable solutions can be developed and shared.

## 1

## BACKGROUND AND PURPOSE OF DOCUMENT

The Global Immunization Vision and Strategy (GIVS) sets a goal of protecting more people against more diseases by expanding the reach of immunization to every eligible person, extending immunization beyond infancy, and promoting immunization to a high level of visibility on every health agenda. To maximize the contribution of immunization to the attainment of Millennium Development Goals, GIVS challenges countries to not only reach at least 90% national vaccination coverage and at least 80% vaccination coverage in every district (or equivalent administrative unit), but also to sustain these gains over the long term.

The means by which GIVS goals are to be achieved fall into four strategic areas, of which the first is to “protect more people in a changing world,” through application of the range of approaches indicated in Box 1.

The first strategy, “use a combination of approaches to reach those who are eligible for immunization,” encourages the balanced use of both routine and campaign-style strategies to increase coverage. Today, many countries have implemented approaches that share features of both routine and campaign service delivery. These activities are marked by both their periodic or intermittent intensified nature—similar to campaigns—and their objective of accelerating improvements to routine immunization coverage. In this paper, such activities are referred to as “periodic intensification of routine immunization” or PIRI, for short.

The purpose of this paper is to contribute to the effective planning and implementation of future PIRI-type activities by examining experiences to date and implications for future action. It briefly summarizes key findings and lessons learned from PIRI-type experiences in many countries and offers practical suggestions by program area for health planners and managers who

are considering implementing such activities. The paper is based on a review of existing documentation and interviews with people who have carried out such activities. While it is not a formal evaluation of PIRI-type experiences, it does draw on evaluation data to the extent that they exist.

### GIVS STRATEGIC AREA I

#### PROTECTING MORE PEOPLE IN A CHANGING WORLD

1. Use a combination of approaches to reach everyone targeted for immunization.
2. Increase community demand for immunization.
3. Ensure that unreached people are reached in every district at least four times a year
4. Expand vaccination beyond the traditional target group
5. Improve vaccine, immunization and injection safety
6. Improve and strengthen vaccine-management systems
7. Evaluate and strengthen national immunization programs

*Box 1. GIVS strategies for protecting more people in a changing world*

## 2

## PIRI – CHARACTERISTICS AND CATEGORIES OF EXPERIENCES

In the past, the distinctions between routine immunization and campaigns appeared clear and straightforward. For many years, particularly with the implementation of disease control initiatives, the differences have been conceptualized as a dichotomy in which routine immunization and campaigns are polar opposites.

TRADITIONAL DICHOTOMY		
ROUTINE IMMUNIZATION		CAMPAIGNS
High coverage with all antigens	OBJECTIVES	Reduce transmission of selected disease(s)
Children under one and pregnant women	TARGET GROUPS	Expanded to children of other age groups and women of child-bearing age
Ongoing: Daily, weekly, monthly, quarterly	FREQUENCY	Intermittent, defined by disease epidemiology
Fixed, outreach, mobile	SERVICE DELIVERY STRATEGY	Fixed, outreach, door-to-door, extra posts, mobile
Doses are considered routine, recorded on child health card	RECORDING/REPORTING	Supplementary doses are tallied but not recorded on child health card (except for maternal and neonatal tetanus elimination activities)
Limited	VISIBILITY	High, with event-based launches and high media attention
Substantial input from government; often under-funded	FUNDING	Often donor-funded and driven; usually better funded than routine

Figure 1. Traditional dichotomy between routine immunization and campaigns.

For routine immunization, the general objectives are to achieve high coverage with all antigens in the target group of children under one and with tetanus toxoid (TT) in pregnant women. By contrast, campaigns generally seek to reduce the transmission of particular, selected diseases in an age group (of children) that is expanded for the duration of the campaign. However, campaigns to support the elimination of maternal and neonatal tetanus (MNT) usually provide three doses of TT to child-bearing age women who ordinarily have very limited access to health services.

For routine immunization, services are usually offered on a daily, weekly or monthly schedule through a combination of fixed and outreach services, plus mobile services in some places. By contrast, the frequency of campaigns for accelerated disease control is intermittent and depends upon the epidemiology of the particular disease. Services are expanded for a temporary period to include not just fixed and outreach, but also many extra vaccination posts and sometimes door-to-door services. Campaigns tend to be nationwide, except in the case of MNT elimination where they target areas that are insufficiently covered by routine services.

Another critical difference concerns if and how doses of vaccine are recorded. For routine services, doses are recorded by age category on tally sheets, registers, and child health cards or mother's cards and are then reported in estimates of coverage in children under one or pregnant women. By contrast, in campaigns, the doses are considered "supplementary;" usually, they are not recorded on the child health card but are recorded on campaign-specific tally sheets, sometimes without disaggregation by age. During MNT campaigns, recording includes the dose and the round, so as to permit estimation of coverage by dose.

Finally, the political visibility and funding of routine immunization is fairly limited because of its routine nature, whereas the event of a campaign captures a high level of attention through special launches and media coverage; this is often accompanied by considerable political and financial support, including from donors.

In recent years, many countries have either tried to push beyond previous limits using more tailored approaches or have used immunization contacts as a vehicle to provide other services on a periodic basis, or both. Sometimes campaigns undertaken primarily to provide other health interventions have added immunization. Taken worldwide, this range of approaches results in a much broader spectrum of experiences, as shown in Figure 2. The distinctions between campaigns and routine immunization become blurred and may become secondary to the public health objectives of the approach.

The periodic intensification of routine immunization takes many forms, with a range of options falling between the poles of routine services and campaigns.

Increasingly, it is standard that other interventions, such as growth monitoring and vitamin A for both children and their post-partum mothers, are offered on the platform of routine immunization contacts. The element of reliable, scheduled outreach has become more prominent in many countries with the implementation of the Reaching Every District (RED) approach.

In areas with extremely weak infrastructure, security problems, or major geographic and resource challenges, the only way to provide routine immunization services may be through pulse immunization, extending outreach to populations every few months. By contrast, most PIRI activities are intended to augment routine immunization services rather than be the primary means of providing it.

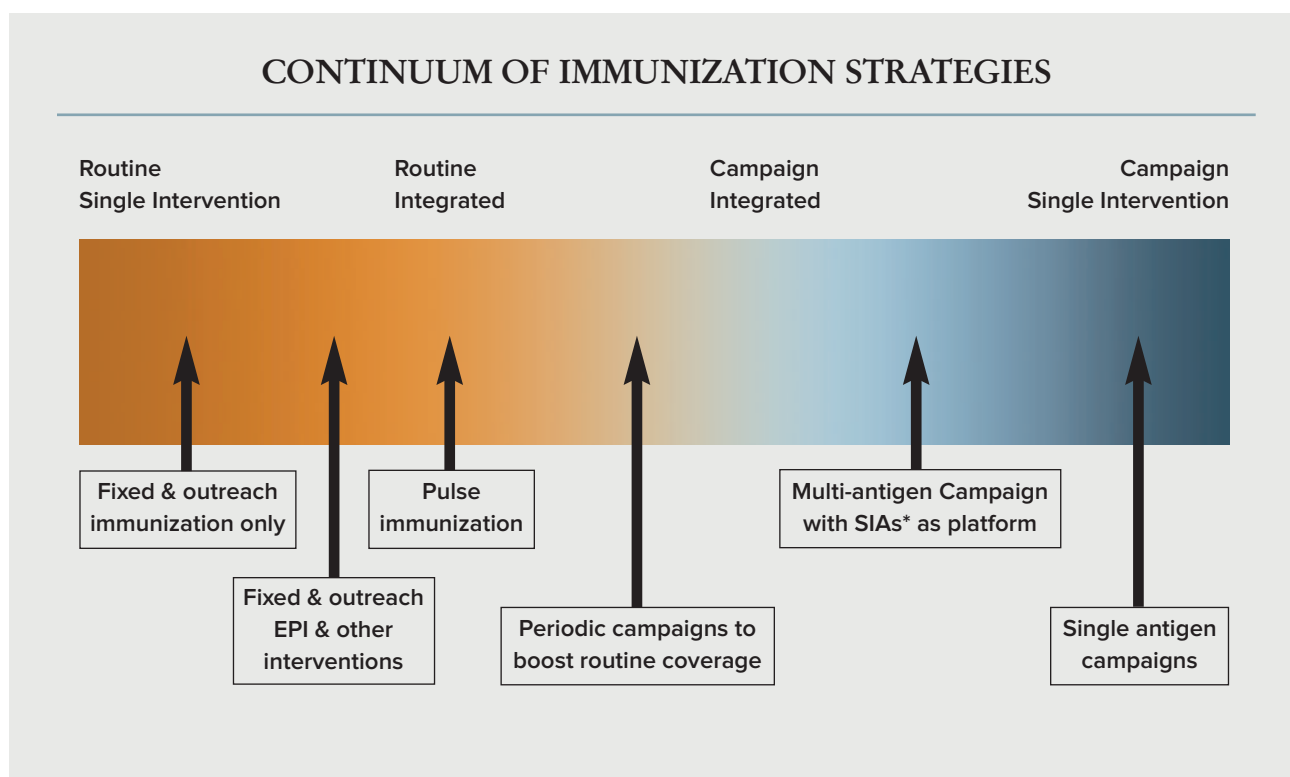


Figure 2

At the other end of the continuum, single antigen campaigns such as National or Subnational Immunization Days (NIDs and SNIDs) represent an option that, at present, is used only in very specific circumstances to control a disease. Far more common are multi-intervention campaigns that use supplementary immunization activities as a platform for providing vitamin A, insecticide-treated nets, and other commodities or rapid services that can be provided on an occasional basis (annually or semi-annually).

Falling between routine and campaigns are periodic events whose aim is to boost routine coverage, that is, increase doses of some or all vaccines in children under one, as well as among pregnant women. These activities are time-limited and are intended to augment routine immunization, not take the place of it. They may also provide other health interventions. Alternatively, such events may take the form of communication or information campaigns to increase community support and demand for routine immunization.

\*SIAs = Supplementary Immunization Activities

Service delivery + IEC/social mobilization		Primarily IEC/social mobilization
Primarily immunization as the intervention	Immunization + other interventions	
<b>Vaccination Week in the Americas, annually since 2004:</b>  <b>45 countries in</b> Caribbean Central America South America North America	Angola	Niger
	Burundi	Nigeria
	Cameroon	Senegal
	Chad	Sudan
	D.R. Congo	Uganda
	Equatorial Guinea	Zambia
	Ethiopia	Zimbabwe
	Ghana	Lao PDR
	Guinea	India (different states)
	Madagascar	Myanmar
	Mali	Morocco
	Mozambique	Yemen
		<b>European Immunization Week:</b>  <b>2005, 2007, 2008</b>  <b>Over 30 countries</b>

*Table 1: Typology and Location of Periodic Intensification of Routine Immunization*

Close to 100 countries have carried out such activities, as indicated in Table 1, using a wide range of approaches.

These activities go by many names and represent many models. A sample includes:

- Child Health Weeks – Zambia
- Maternal and Child Health Weeks – Madagascar
- Child Plus Days – Uganda
- Immunization Weeks – India
- Child Health and Sanitation Week – Pakistan
- Vaccination Week in the Americas
- European Immunization Week
- Periodic mobile health services (Yemen)
- Regular Events to Advance Child Health (REACH)



This paper summarizes experiences with periodic intensification of routine immunization based on a review of documents and interviews with personnel involved in these activities. The types of experiences included in this review met the following criteria:

1. Any such experience must include an immunization activity. Some intensified maternal and child health activities are conducted to provide other services and do not include an immunization component.
2. The immunization activity must aim specifically to improve routine immunization coverage. Activities in which the only immunization element was the provision of supplementary doses of vaccine, either for children or women, were excluded from this review because they have different goals and approaches for achieving them.
3. To be considered as a periodic intensification of routine immunization, activities that were included in this review were periodic and time-limited, as opposed to ongoing (such as monthly outreach).

The ability to generalize across highly diverse experiences in countries with vastly varying levels of infrastructure is challenging. Moreover, these experiences evolve from year to year, based on changing health and funding priorities and assessment of experience from previous years.

## 3

## EXPERIENCES, LESSONS LEARNED, AND IMPLICATIONS FOR ACTION

Most PIRI-type activities have not been subject to formal evaluations that systematically examine the operational aspects of their planning and implementation. Yet, the extent to which such activities achieve their goals and support, complement, disrupt, or compete with routine immunization is largely a function of managerial capability in planning and conducting them. The following section of this paper summarizes findings that were common across many countries and suggests practical areas for action. The areas addressed include: decision-making, goals, objectives, and choice of interventions; planning, budgeting, coordination; recording and reporting vaccination achievements; supplies and logistics management; training, orientation, and human resource issues; and communication, social mobilization, and community engagement.

### 3.1 DECISION-MAKING, GOALS, OBJECTIVES, CHOICE OF INTERVENTIONS

#### REASONS FOR CONDUCTING PERIODIC INTENSIFICATION ACTIVITIES

Over the past five to ten years, nearly 100 countries have carried out periodic intensification activities whose objectives are to strengthen or improve routine immunization. These highly diverse experiences have their own unique goals and objectives, ranging from increasing routine immunization coverage to increasing public awareness and support for immunization, to providing additional health interventions in conjunction with immunization, to introducing new vaccines, to providing a rapid catch-up after a period without vaccination (for example, because of vaccine stock-outs or political instability). Such activities have been carried out in dozens of African, American, and European countries as well as in south Asia, but to a lesser extent in east and southeast Asian countries. While large-scale regional initiatives in the Americas (Vaccination Week in the Americas or VWA) and Europe (European Immunization Week) have region-wide goals and synchronized timeframes, individual countries participating in these events set their own objectives and employ strategies and interventions that are tailored to address their own specific needs.

In several African countries as well as in some states in India, the PIRI activity was prompted by concern over low routine immunization performance and the belief that existing routine services would not increase coverage in the near term. Political and financial support for a temporary acceleration in routine immunization was readily available. In these countries, the primary intent has been to provide additional vaccinations that contribute to, and can be captured in, estimates of routine coverage. By contrast, in several countries in Europe and some in the Americas, the primary intent of annual immunization weeks is to solidify community and political support for routine immunization rather than to provide vaccination. However, this is evolving: the 2008 Vaccination Week in the Americas set a target of providing 62 million doses of vaccine.

Some countries have used periodic accelerated immunization activities to both improve routine immunization and achieve specific disease control objectives. In some situations with limited infrastructure and managerial capacity, this has contributed to confusion in implementing the activity and measuring progress toward the objectives, leading one evaluation to recommend against this combination of objectives.

### **PURPOSE: SERVICE DELIVERY, DEMAND CREATION, OR BOTH**

In countries with limited infrastructure for service delivery, PIRI serves as an important strategy to augment the provision of immunization services. This has been the case in Chad, Niger, Yemen, and Sudan—countries facing severe geographic challenges and limited human resources. In Yemen, the periodic intensification takes the form of increased, systematic vaccination outreach which is now carried out six times per year. In countries with higher immunization performance (as in Europe and the Americas), annual “immunization weeks” place greater emphasis on increasing demand for and reducing resistance to routine immunization, while providing highly targeted vaccination service delivery to underserved populations. These include cross-border populations, pockets within urban areas, and particular groups that are insufficiently reached, such as indigenous groups in the Americas or Roma populations in Eastern Europe. In some countries in the Americas, Vaccination Week has also been used as the vehicle to introduce new vaccines: for example, rotavirus in Venezuela and pneumococcal vaccination of older adults in Brazil.

### **WHO INITIATED THE ACTIVITY**

PIRI activities have often been instigated by immunization programs. However, in countries where the weak health service delivery infrastructure has only limited ability to provide either immunization or vitamin A supplementation, the nutrition program has instigated the semi-annual events. These Child Health Days or Weeks are scheduled at intervals of approximately six months in order to permit target groups to receive at least two doses of vitamin A in a 12-month period.

### **ANTIGENS PROVIDED**

For immunization, most countries provide all antigens except BCG because of the special skill required for its administration. Some countries provide all antigens but only to selected target populations (for example, some countries in Latin America). In Jharkhand state of India, only vitamin A and measles vaccination were provided in the first year of the PIRI activity, but tetanus toxoid was added the following year; in subsequent years, all other antigens except BCG were added.

### **ADDITIONAL HEALTH INTERVENTIONS**

The choice of interventions in addition to immunization varies across countries. In many countries, immunization itself has been added to campaigns whose primary purpose is to provide nationwide vitamin A supplementation to children and postpartum women. Other health interventions include Mebendazole to children for deworming, insecticide-treated nets to prevent malaria, iron folic acid tablets for anemia; and intermittent presumptive treatment (IPTp) of malaria for pregnant women (Cameroon). Some countries also use the events as opportunities to reinforce the caregivers’ knowledge and practice on the use of oral rehydration therapy. However, given the high volume of activity during the short period of the event, most countries focus on the distribution of commodities or rapid administration of specific treatments (e.g. deworming). In Madagascar, the provision of family planning services during the same events that provided TT to child-bearing age women led to confusion and mistrust. These activities were subsequently de-linked.

## TARGET GROUPS

One common feature of most PIRI efforts is the focus on children and women. For countries providing services during the PIRI activity, the precise target groups vary by health intervention; this introduces complexity into planning, logistics, communication, and service delivery. In several African countries, for example, immunization is provided to children under one as well as to older children; in some countries, TT is provided to child-bearing age or pregnant women. Vitamin A is usually provided to children 6–59 months of age and women up to six or eight weeks post-partum, depending upon national policy. Mebendazole for deworming is given to children 12–59 months old or may be expanded to include older age groups, depending upon national policies and local epidemiology. Pregnant women in some countries are provided with iron-folic acid tablets and intermittent prophylactic treatment for malaria (IPTp). Caregivers of children under five are provided with insecticide-treated nets (or their nets are retreated during the event)<sup>1</sup>. This means that during the event itself, different people waiting in line and even different members of the same family are eligible for different interventions. Health workers and volunteers must be able to quickly determine who is eligible for what and be able to explain to those in line why certain interventions will be given to some people but not others. Health workers must be able to decide and communicate which family members need to go for which services.

For countries whose periodic intensification takes the form of communication and demand creation activities, target groups are defined in a very different way. For European Immunization Weeks, designated target groups include vulnerable children and their parents/caregivers, health professionals, stakeholders such as political officials, and the media. These are the groups whose support is deemed vital to promoting and utilizing routine immunization services.

## SCOPE AND EXPANSION

The geographic scope of intensified routine immunization activities has varied widely across countries and is a function of the specific objectives adopted by the country, as well as the country's size and health structure. While some countries provide service delivery on a nationwide scale during their periodic intensification, others use their resources to target low-performing areas. The same mix is seen in countries focusing on demand creation and reduction of resistance to immunization, as in European Immunization Weeks. While this initiative increases the visibility of and support for routine immunization among the general public and stakeholders, it particularly focuses on identifying and better addressing the concerns of groups that may be overlooked during routine immunization activities. It also uses targeted channels of communication to reach them.

The regional initiatives in Europe and the Americas have grown substantially since their inception. Vaccination Week in the Americas has expanded from 19 countries in 2003 to 45 countries in 2008, while European Immunization Week has grown from 9 countries in 2005 to 33 countries in 2008.

---

<sup>1</sup> This may change because the Global Malaria Programme has recently expanded its target to include all people at risk of malaria.

## COMMON ISSUES AND OBSERVATIONS ACROSS PIRI-TYPE ACTIVITIES

### GOALS, TARGETS, AND INTERVENTIONS

- In countries where PIRI activities include service delivery, multiple health interventions are usually provided to different target age groups. This increases the utility of the event; however, if more than 3–4 interventions and age groups are included, the planning and management burden may overburden a weak health infrastructure, possibly compromising the quality of services.
- The adoption of PIRI targets to simultaneously augment routine immunization coverage and support the achievement of accelerated disease control goals is particularly difficult to manage in terms of planning, supply management, logistics, recording and reporting of doses, and communication.
- Clearly articulated, measurable objectives for the PIRI event help to focus the activity and delineate its contribution to long-term improvements to routine immunization. In countries where that focus is not clear, the PIRI activity risks diverting attention and support away from routine immunization.

### IMPLICATIONS FOR ACTION

Activities to periodically intensify routine immunization are widespread, popular and useful for increasing support for immunization and temporarily providing increased services. To maximize the benefits, consider doing the following:

- ✓ Set clear objectives that respond to specific obstacles to high routine immunization performance. These objectives may represent a balance between the ideal and what is feasible in terms of the interventions provided, the specific target populations to be reached with each intervention, the geographic scope of the activity, and the available human and financial resources.
- ✓ Avoid overly-complex objectives, particularly in places with limited health infrastructure, as they can overburden a fragile health system and disrupt services, rather than improving them. Be especially careful in setting immunization objectives that aim to simultaneously increase routine immunization coverage in one age group and achieve accelerated disease control objectives in an expanded or different target group. These multiple objectives require particularly close attention to detail in planning, logistics, messaging, monitoring, training and supervision.
- ✓ In setting objectives, estimate both the expected increases in performance and the means by which those increases will be measured. This is discussed more in the section below on recording and reporting achievements.
- ✓ In addition to estimating the benefits, also analyze the risks or unanticipated consequences of conducting the periodic intensification. Will it complement or will it disrupt routine immunization services in the long term? Will it overwhelm district and facility-level human resources? Will it create the expectation among the general population that immunization only occurs during these events? Will it reinforce the concept of the usual

fixed site (or “medical home”) where people usually obtain services? Will it lead mothers to wait for occasions when they can receive additional goods or services (such as ITNs) before they get their children vaccinated? By first identifying risks or vulnerable areas, it is then possible either to manage them through detailed planning or revisit and revise the PIRI objectives as needed.

- ✓ Map out the relationship between the immediate-term improvements achievable through PIRI and long-term improvements to be made in routine immunization. In areas with strong health infrastructure, periodic boosts may become a standard feature of annual immunization plans to supplement routine services. In some countries with weak infrastructure, however, they may be a short-term measure to address immediate needs as the country works toward a stronger overall health system. In such situations, the periodic intensification activity should not divert attention or resources away from achieving the longer-term goal and must be planned in a deliberate manner to complement routine immunization while avoiding harm.

## 3.2 PLANNING, BUDGETING, COORDINATION

### PLANNING

Standardized planning tools, a planning horizon of several months, and clear delineation of responsibilities at different levels of the health system are essential elements in the successful

planning of periodic intensification of routine immunization. Guidelines and planning tools have been developed for the regional initiatives in the Americas and Europe for countries to adapt to their own particular circumstances. In other regions, most countries have developed their own planning guidelines that have been revised based on early experience with their use.

For European Immunization Week, the overall planning approach is comprised of three elements: (i) a situation analysis to identify the barriers to routine vaccination and the populations to be targeted; (ii) analysis of these target groups, including formative research to identify how to address the barriers they face; (iii) planning, implementation, and evaluation that includes representatives from the high-risk groups. Similarly, the planning approaches used for Vaccination Week in the Americas focus on

the “population dynamics” of high risk groups, identifying their seasonal movement and how and where they access health services and information.

In some countries, the six-month interval between child health weeks, generally adopted for purposes of vitamin A supplementation, also corresponds to the timeframe needed to review the most recent intensified event and plan, budget, and prepare for the next one—while also providing ongoing routine services. Successful microplanning down to facility level requires identifying left-out groups and defaulters, analyzing service utilization patterns, identifying



Photo courtesy: WHO



where and when stock-outs occur, and identifying the most effective means of communication and community engagement. All of these considerations apply to microplanning for routine immunization services as well as for intermittent events to boost coverage. For periodic events which may have a faster track for planning and budgeting, this information may be put to immediate use in informing forecasts for commodities and requesting the release of funds from the national level for implementation.

## **ROLES AND RESPONSIBILITIES**

Several countries have underscored the need to clarify the responsibilities of national and subnational levels in planning for PIRI events. While the national level usually leads such initiatives, management at subnational (district or state) level plays a critical role in detailed planning and implementation. Their full engagement is essential to the long-term institutionalization of such approaches, particularly in decentralized health systems in which districts take the lead in annual health planning and budgeting.

Responsibilities of the national level usually include: instigating the event and setting the date; engaging high-level political support; deciding on the health interventions to include; selecting the locations (if not nationwide scale); procuring commodities; producing planning and budgeting guidelines; mobilizing large-scale resources, providing funding to operational levels; leading planning efforts, and arranging for high-visibility activities to launch the event.

Subnational levels are generally responsible for carrying out detailed micro-planning; forecasting commodity needs; developing budgets; planning cold chain and logistics needs in detail; conducting training and supervision of health personnel and volunteers; mobilizing communities and organizing local communication; mobilizing resources needed to augment those provided by the national level; and overseeing the recording, reporting, and use of data.

## **BUDGET**

In some situations, it is easier to mobilize funding for campaign-style events than for routine immunization. The high visibility of campaigns is attractive from a political point of view and draws attention to a fundamental, equitable, and usually well-accepted service that governments provide to their citizens. This appeal may diminish to some extent with the increasing institutionalization of annual immunization weeks or semi-annual child health weeks.

In the Americas, countries have protected annual immunization weeks by creating a line item in the national budget and ensuring that budget allocations support it. In Yemen, health officials developed a spreadsheet that demonstrated the high cost-effectiveness of bi-monthly outreach in order to secure ongoing financial support from the government for this purpose. Other countries with decentralized health systems, such as Zambia, have incorporated child health weeks into the formal district-level annual planning process, with pooled basket funds from the government and donors used to fund them. In other countries, the detailed district plans used for budgeting have pointed out the insufficiency of the funds provided to districts by the national government. This, in turn, has highlighted the need for additional fund-raising at both national and district levels.

Most countries have developed budget templates for PIRI activities. In Uganda, a review of experience indicated some hidden or underestimated costs. These included the costs of reaching

more remote, difficult-to-access populations that are traditionally underserved by routine services (thus, particularly important during Child Plus Days) and costs associated with stakeholder engagement and community participation.

### COORDINATION

As is true with most immunization campaigns, coordination is a vital element of planning and resource mobilization for periodic intensification of routine immunization. Frequent meetings of Interagency Coordinating Committees (ICCs) have proven useful in setting priorities, securing funding, identifying additional partners, and ensuring that different, sometimes vertical, health programs conduct joint planning to achieve mutual benefits. In one intensification activity in Niger, the heads of the local offices of major partners and nongovernmental organizations (NGOs) each “adopted” a different region of the country, assuming major responsibility for technically and financially supporting each region’s health authorities to ensure the event’s success. In many countries, the broader array of health interventions (as opposed to routine immunization) has meant a broader range of partners willing to support it, including private businesses and NGOs.

## COMMON ISSUES AND OBSERVATIONS ACROSS PIRI-TYPE ACTIVITIES

### PLANNING, BUDGETING, AND COORDINATION

- Short planning horizons (less than six months) have been a common problem that both reduce the ability to plan effectively for the accelerated event and disrupt routine health services, including immunization.
- The high visibility and political appeal of PIRI-type events can draw additional resources to immunization. Some countries have used these resources to investigate the needs of hard-to-reach or resistant groups and this can, in turn, inform the development of strategies to reach those groups both through PIRI and routine immunization.
- The district level plays a critical role in planning and managing PIRI activities, ultimately determining the extent of their success. Yet it is the national level that most often decides the parameters for PIRI events with limited input from the district. This reduces the likelihood of institutionalizing the commitment to the activity over the long term at the operational level.
- Annual or semi-annual PIRI activities appear to allow for adequate planning in a way that complements and augments routine immunization. If held more frequently, these events become confused with routine immunization and substantially increase the requirements for human resources.
- Post-event reviews with representatives from national, district, and peripheral levels are used in many places to quickly identify areas for improvement in planning for the next event.

## IMPLICATIONS FOR ACTION

- ✓ Schedule the PIRI event for a time period that presents minimal schedule conflicts (e.g., holidays or rainy season) and is optimal for epidemiologic impact (e.g., before measles season). For managerial purposes as well as clear communication with the community, the date should be synchronized across all parts of the country, unless there is a compelling reason not to do so. Once it is set, it should not be changed.

---

- ✓ Begin planning for the event at national and subnational level at least six months in advance, distributing current guidelines and instructions to the operational level.

---

- ✓ Institute a process to review the data from previous events, as well as from routine immunization, in order to identify achievements to replicate and problems that require a revised approach. Consider carrying out formative research with groups with particularly low utilization of services to uncover the barriers they face and the approaches for overcoming them.

---

- ✓ Use updated demographic data for microplanning and to forecast the required amounts of commodities.

---

- ✓ Use microplans as a basis for developing budgets. Review previous budgets against actual fund allocations to identify items that need to be budgeted more accurately—for example, costs of reaching the hard-to-reach.

---

- ✓ Identify steps to take in the event of funding shortfalls and clarify whether it is the primary responsibility of the national or subnational level to raise additional funds.

---

- ✓ To facilitate the institutionalization of a PIRI activity, advocate for its inclusion in the immunization budget line item and include its costs and anticipated sources of funding in the immunization comprehensive multi-year plan (cMYP). Identify the steps needed to incorporate it into annual district planning.

---

- ✓ Convene frequent meetings of partners and programs participating in the event to secure commitment from a broad base of support and assure adequate planning.

---

- ✓ Use the high level of political and community attention to the periodic event to mobilize funds and support for routine immunization.

---

### 3.3

## PROCESSES TO RECORD AND REPORT ACHIEVEMENTS

Depending upon the specific, desired outcome for a PIRI activity, the recording and reporting of achievements can present special challenges. In most immunization campaigns, accomplishments are described in terms of the targets set for the campaign itself. These may include, for example, the number of children under five years of age immunized during the campaign compared to the number of children under five that the campaign targeted. For information and awareness-raising campaigns, measures may include numbers of materials

distributed, messages broadcast, or special events held.

For more sophisticated reporting, population-based surveys yield more accurate estimates of coverage or can provide estimates of the percent of the target population who heard or received a key message. Most PIRI-type achievements are documented in terms of descriptions of the event and its own goals, rather than in terms of the event's direct contribution to routine immunization coverage.

If, however, the goal of an event such as a child health week is **to boost routine immunization coverage among children under one year of age and pregnant women for a given calendar year**, then recording and reporting steps become more complicated. In particular, health officials must assure that both the numerator and denominator of a coverage estimate include only children under one and that the numerator does not double-count doses received through both routine immunization and the PIRI activity; to do so would inflate the coverage estimate.



Photo courtesy: WHO

### RECORDING OF DOSES

Complications with recording doses administered during a PIRI activity concern both the denominator and the numerator that comprise the estimate of routine coverage.

For routine immunization coverage reported by WHO and UNICEF, the denominator or target population is children under 12 months of age (one year). However, one issue emerging across several PIRI experiences is that when there is an expanded target age group for immunization (e.g., children under five years of age), health workers may not systematically record the doses of vaccine administered by age on the tally sheet or on the child health card. If all doses are recorded as being given to children under one when they are actually given to older children as well, the result is an inflated estimate of coverage in children under one as well as a distortion of the contribution of the intensification activity to routine coverage. In some instances, this has arisen because written guidelines are not clear. In other cases, the guidelines are clear but training and supervision is inadequate. Even if well-trained and supervised, health workers may still find it difficult in the hectic campaign environment to take the time to screen children by age and vaccination history (according to the card or register) and record doses in

the corresponding column of the tally sheet. The same is true for screening pregnant women for history of TT doses.

Another issue observed in some countries is the tendency to record all doses of DTP given during the event as DTP3, rather than distinguishing the dose as DTP1, 2, or 3. This may be due to the heightened attention and incentive by GAVI and other partners on attaining high coverage for DTP3. It may also be exacerbated by the tendency of PIRI activities providing DTP vaccine to set their targets in terms of DTP3 rather than DTP1 or 2.

The presence or absence of the child health record or woman's vaccination card on the day of the event is particularly important. If a caregiver has not brought her child's health card to the event and doesn't recall how many doses of DTP her child had already received, then the health worker must record the dose without the benefit of knowing which dose it is. Lacking the ability to screen the child's vaccination status, the health worker may also give the child doses of vaccines that he or she has already received. While this may provide extra protection to the child, it also inflates the resulting estimate of routine immunization coverage. The same occurs with women immunized during TT campaigns: in the campaign environment, inadequate screening of vaccination history results in the provision of more doses of TT than are needed. The extent to which this happens at present is not known.

Another complication for accurate recording is that during the PIRI activity, the routine immunization registers maintained at fixed facilities cannot be made available to the many vaccination posts that are set up temporarily during the event. In some instances, the names of children receiving vaccinations during the intensified activity are written down on pieces of paper for later entry onto the register—but that subsequent entry is not reliable, accurate, or complete.

## REPORTING TO HIGHER LEVELS

In several countries conducting PIRI-type activities, health workers record doses administered on the facility-based tally sheet for the campaign but, as described above, not consistently on the child health record or maternal health card kept at home. Caretakers or pregnant women may not consistently bring these cards to a campaign-type activity, and health workers may not have extra stocks of cards to issue that day. In such cases, the doses administered would not be captured in subsequent population-based coverage surveys. So, while the tally sheets and the administrative estimates they generate would overestimate routine coverage, the failure to record the same doses on the child health card could lead to an underestimate of coverage derived from coverage surveys. Neither estimate would be accurate and the difference between them could be substantial.



Photo courtesy: WHO



## COMMON ISSUES AND OBSERVATIONS ACROSS PIRI-TYPE ACTIVITIES

### RECORDING AND REPORTING

- In countries providing immunization services during a PIRI event, poor attention is given to accurate recording of doses administered. Doses are often not recorded correctly or consistently; e.g., all doses of DTP-containing vaccine may be recorded as DTP3. Accurate recording is impeded by the high volume of activity and multiple interventions provided during these events. More attention to the issue of accurate recording is needed during training and on-site supervision.
- Child health cards retained by the family are not generally used during PIRI activities, so health workers cannot review the child's vaccination history or conclusively determine which doses of DTP-containing vaccine to give the child during the event. This can contribute to inaccurate dosing and recording of doses on tally sheets. If the doses given during the event are not recorded on the child health record, then health workers are also unable to determine the correct dose to give during at subsequent vaccination contacts. The failure to fill in the child health card during the PIRI activity is also likely to underestimate coverage as derived by population-based surveys.
- The success of most PIRI events is measured in terms of the goal for the event, and not in terms of its contribution to annual routine coverage estimates. The inaccuracies with recording described above can carry forward to inflate annual estimates of routine coverage.

### IMPLICATIONS FOR ACTION

- ✓ Prepare written guidelines with clear instructions about how to quickly determine the child's age during the intensified immunization activity and record vaccine doses according to age of the child. If TT is to be included in the event, add instructions on how to assess the woman's immunization status.
- ✓ During training of health workers and their supervisors, emphasize the importance of screening children and women, and, depending upon the particular objectives of the intensified activity, give only the doses for which the child or woman is eligible rather than administering "extra" doses. Also emphasize the correct recording during training before the event and during supervision in the course of the event. During child health days or weeks, arrange for supervisors to review recording procedures at different sites at the end of each day so that they can improve practices immediately, as needed.
- ✓ Provide all vaccination points with adequate stocks of tally sheets; these should disaggregate doses given to those children under 12 months and 12 months or older. Tally sheets for women should permit the recording of the number of dose administered during the event. Also provide sufficient stocks of vaccination cards at each site and encourage health personnel and volunteers to issue new cards to those caregivers who have not brought their own card or their children's health cards.



- ✓ In promotional materials and messages before and during the event, encourage caretakers to bring from home their children's health cards, as well as their own cards.
- ✓ Instruct health personnel to record other health interventions provided during the PIRI activity on the child's health card. To assure accuracy, the recording should be done for each intervention once it has been provided.
- ✓ In analyzing the results of the event and estimating the contribution to annual childhood routine immunization coverage, include only those doses administered to children under one year of age.
- ✓ Conduct occasional spot surveys during or immediately following the PIRI event as a means of informally assessing the accuracy of the figures from tally sheets and identifying areas that may not be reached during the event.

### 3.4 SUPPLIES AND LOGISTICS MANAGEMENT

The success of any immunization activity, whether routine, campaign, or PIRI, ultimately depends upon having the right product available in the right quantity at the right time and place. For periodic events with multiple interventions involving different target groups and heightened publicity, both the logistical complexities and the stakes for success may be elevated. However, the resources available to support the event may be greater than for routine immunization, and many countries have acquired valuable experience through multi-intervention supplementary immunization activities.

With regard to supplies management, some countries have reported confusion and difficulty in forecasting the necessary amounts of vaccines, needles, and syringes, especially when the distinction between periodic intensification, routine immunization, and supplementary doses is not well-defined. In large countries where different provinces or states are conducting different activities and managerial capacity at subnational level is limited, these challenges can be substantial.

In countries where intensified activities involve the delivery of multiple health interventions, a major challenge has been to assure the timely delivery of all commodities to service delivery points. In several instances, problems have arisen both because funds for different commodities have become available at different times and the logistics management needs vary considerably among such diverse products as vaccines, bednets, and deworming medication. Active coordination and advance planning is needed to reduce the occurrence of this problem.



Photo courtesy: WHO

## COMMON ISSUES AND OBSERVATIONS ACROSS PIRI-TYPE ACTIVITIES

### SUPPLIES AND LOGISTICS MANAGEMENT

- Not all commodities for different interventions have been available in time for the event (e.g., insecticide-treated nets);
- Not all commodities have been available in the quantities or presentations needed (e.g., vitamin A only available in 200,000 I.U. capsules when 100,000 I.U. capsules are needed for infants); this has resulted in last-minute decisions about whether all sites can provide identical services;
- Practice of "borrowing" buffer stocks of vaccines for routine immunization because of the short timeframe for planning the vaccination week;
- Sufficient supplies but inadequate logistical support to transport the supplies to where they are needed; inoperable vehicles and lack of financial support to districts for hiring vehicles on short notice;
- Insufficient preparation for injection safety and the large volume of sharps waste generated; if additional health posts are set up for the event, then decisions must be made as to whether to transport waste to a centralized location or destroy it at the vaccination site;
- Inadequate supplies of fuel to operate generators at temporary health posts;
- Following the event, unused excess stocks of vaccines remain at the most peripheral and weakest levels of the cold chain for extended periods.

### IMPLICATIONS FOR ACTION

- ✓ As part of systematic microplanning, conduct inventories of functioning cold chain equipment, including cold boxes, vaccine carriers, stocks of vaccines, auto-disable syringes and safety boxes.
- ✓ Develop and monitor a timetable for the procurement of commodities and their distribution to each subnational level. Clearly designate who is responsible for each step at each level of the health system and provide contact information.
- ✓ Provide guidelines to all levels on forecasting needs for the intensified immunization activity. These should protect the stocks of vaccines and commodities needed for routine immunization.
- ✓ Develop plans at all levels for transport, including contingency plans and budget for emergency transport and logistical needs. Ensure that there is sufficient budget for the district cold chain officer to move about the district to ensure readiness before the event and provide rapid support during the activity. Supervisors should also be provided with extra supplies of commodities to top up those posts that may have underestimated their needs and run out of supplies early.

- ✓ Provide instructions to districts and facilities on steps to take immediately following the campaign to update stock records and retrieve and/or store excess vaccine remaining at higher and safer levels of the cold chain. These supplies should be included in estimates for subsequent vaccinations activities.

---

- ✓ Provide clear guidance and training to vaccinators and their supervisors about steps to take if they encounter less than ideal circumstances, e.g., a suspected break in the cold chain, insufficient quantities of vaccines, diluents, auto-disable needles, syringes, or safety boxes.

---

- ✓ Give particular attention to waste management issues. Forecast the number of safety boxes needed such that a box is within arm's reach of every vaccinator. Plan for the timely delivery of boxes, including buffer stock. Decide on where to temporarily store filled safety boxes during the days of the event so they do not pose a hazard. Decide on the final means of and destination for waste disposal and confirm that the appropriate authorities are able to accommodate the waste. Plan and budget for vehicles, drivers, and fuel to rapidly transport waste from all vaccination sites during the PIRI activity to final destinations for waste disposal.

## 3.5

### TRAINING, ORIENTATION, AND HUMAN RESOURCE ISSUES

Any type of immunization service delivery strategy depends upon qualified, capable personnel in sufficient numbers to carry out the indicated activities. In low-resource situations with weak health infrastructure, limited human resources must stretch across multiple programs as well as routine, campaign, and, where implemented, PIRI strategies. The use of human resources for PIRI planning should not detract from the routine immunization that PIRI seeks to support.

Most countries developed national guidelines and management tools to serve as the basis for training. The regional and country offices of the World Health Organization and UNICEF have played important roles in providing technical support in developing these tools. However, despite the additional resources that the PIRI activity attracted for training, many countries in low-resource environments reported that staff were insufficiently trained prior to the event and inadequately supervised during its implementation.

#### TRAINING

Some countries described positive experience using a cascade approach to training. Others found that cascade training results in dilution in the quality of training at peripheral levels. Zambia initially used cascade training but switched to a “cluster training” approach that brings staff from several sites together for a larger training of higher quality. Training of supervisors now begins one month before the start of the Child Health Week, and training of facility staff takes place a week before the start. This helps ensure that skills can be applied as soon as possible following the training. The content of the training emphasizes practical past experience



Jos Vandelaer,  
Courtesy of Photoshare

in how to solve problems as they arise, for example, how to record doses correctly during the circumstances of the intensified activity.

### SUPERVISION

Several countries highlighted the need for national-level supervision. Some observed that the quality of supervision provided by district level was inadequate to address common problems in a practical and immediate way. However, the provision of supervision from national level is a major challenge in large countries where the ratio of vaccination sites to national supervisors is very high. In Chad, medical students were enlisted to serve as supervisors, an approach that helped both to assure the quality of the

Child Health Week and build long-term capacity for immunization management among the country's future doctors. In Zambia, retired nurses and other extra persons were hired and given per diem to serve as supervisors at district and facility levels. Supervisors must be able and willing to available to travel throughout the activity, and must have sufficient resources to enable this to happen.

### ADDITIONAL HUMAN RESOURCES

In countries as diverse as Niger, Lao PDR, Equatorial Guinea, and many countries in the Americas, volunteers and staff from nongovernmental organizations have augmented the workforce to support the PIRI activity. While volunteers do not require salary, they usually do require compensation in the form of lunch and reimbursement of travel expenses. Private businesses have also supported PIRI activities, including through in-kind contributions to support health personnel and volunteers; for example, a phone company in Zambia provides cell phones to supervisors for the duration of the event. While volunteers can greatly expand the human resources temporarily, they require training, supervision, and management. If they have worked previously on supplemental immunization activities like polio eradication or measles campaigns, they must be re-oriented to understand the objectives and procedures for periodic activities to accelerate routine immunization.

## COMMON ISSUES AND OBSERVATIONS ACROSS PIRI-TYPE ACTIVITIES

### TRAINING AND HUMAN RESOURCES

- Cascade training is commonly used for rapid, large-scale training, but often results in diluted content, front-line training of variable quality, and insufficiently prepared health workers or volunteers. Alternatives such as “cluster training” by teams may be more effective.
- The exact activities included in a PIRI activity change from year to year in many places, so these changes must be emphasized in training of health workers and volunteers who have participated in events from previous years.
- Provision of district level supervision is often inadequate and needs extra attention in planning and budgeting.
- Large cadres of volunteers are vital to the success of PIRI activities. Although voluntary, they are not free in that substantial human and financial resources are required to retain and manage them.
- Private businesses and industry have been enlisted to provide material and in-kind resources that have been vital to the success of campaigns in some countries.

### IMPLICATIONS FOR ACTION

- ✓ Prepare training guidelines and managerial tools that put the focus on the most important technical and practical information, including problem-solving for common issues that are likely to arise. Include practical information in management tools, such as suggested organization at posts to facilitate the rapid flow of patients.
- ✓ Periodically review and revise the technical content based on past experience as well as any changes in the activity itself.
- ✓ Coordinate training efforts with supplies and logistics planning to ensure that health workers have access to the required commodities and are able to carry out the skills for which they have received training.
- ✓ Tailor the training to the tasks of different cadres of health workers or participants. The same technical information serves as a basis of training for vaccinators, supervisors, and volunteers, but each group needs to recognize and be capable of performing its own specific responsibilities.
- ✓ In developing training materials, apply principles of effective adult education by emphasizing active learning activities over passive, didactic lecturing. Provide opportunities for participants to practice the most important skills, including screening and recording of doses. Conduct exercises to confirm participants’ understanding of the steps they need to take before, during, and after the PIRI activity.

- ✓ During training, give health workers and volunteers a standard set of counseling messages and provide opportunities to practice their skills in giving these messages to clients.

---

- ✓ Use training as an opportunity to reinforce key principles of routine immunization, such as screening, proper recording of doses, injection safety, and key messages to be provided. These messages should clearly indicate that the PIRI activity is not a replacement for routine immunization and also give inform the parent/caregiver about when and where to return for the next immunization.

---

- ✓ Adopt a training strategy(ies) that standardizes the quality of training as much as extent possible. For trainers, develop a facilitator's guide that provides a turnkey approach to training by specifying target group, learning objectives, organization/procedure, duration, materials needed, and learning activities or exercises for each session. Conduct training of trainer sessions (TOTs) to build not just the knowledge but the training capabilities of trainers. Seek input from expert training institutions or projects to help assure the quality of training.

---

- ✓ Develop and distribute standardized tools for supervisors, including a list of responsibilities, observation checklists, and possible solutions for common problems. Clearly designate lines of responsibility and relationships between supervisors and health workers, volunteers, and auxiliary personnel from NGOs or other organizations. Build supervisor skills to not just identify problems, but also provide constructive feedback and rapid problem-solving.

---

- ✓ Widely share contact information for health personnel and supervisors, including cell phone numbers, so that in the event of a problem, health workers have easy access to colleagues and supervisors to help find rapid solutions.

---

- ✓ Expand human resources for supervision by temporarily recruiting people with a health background. Enlisting retired health workers helps to provide seasoned, experienced inputs for the event. The use of students requires greater orientation and supervision but may serve as a valuable learning experience and investment for the future.

---



### 3.6

## COMMUNICATION, SOCIAL MOBILIZATION, AND COMMUNITY ENGAGEMENT

One of the most prominent aspects of an immunization campaign, regardless of whether for supplementary or routine immunization, is the high level of social mobilization, communication, and community participation.

For certain countries participating in Vaccination Week in the Americas and European Immunization Week, there is no service delivery component and the express purpose of the activity is to increase awareness and support for routine immunization. While highly visible communication is a critical component of the event, equally important is the preparatory work leading up to that communication. In different countries, this has included:

- building a trusting relationship with the media in order to promote accurate reporting on immunization;
- analyzing the barriers to immunization of underserved populations such as indigenous, migrant, displaced, or nomadic groups and then developing long-term solutions to reach them;
- developing a better understanding of why some groups resist immunization in order to better address their concerns;
- securing the support of policymakers and other stakeholders for additional resources to reach the underserved.



Photo courtesy: WHO

Similar activities can be undertaken to support both PIRI-type activities with a service delivery component and routine immunization.

In virtually all countries conducting PIRI-type activities, a mix of communication, social mobilization, and community participation activities have been used. These typically involve the use of mass media (television; national and community radio; plus short message service in some European countries) and print media, including newspapers and magazines. Launch ceremonies are usually carried out to showcase the support of high-level officials, including heads of state, heads of the ministry of health and other ministries (e.g., Education, Women's Affairs), governors, mayors, religious and community leaders. Popular and trusted personalities from TV, sports, movies, and music are also engaged as messengers to promote immunization, as are popular images such as Sesame Street characters in the Americas. At community level, countries use a variety of approaches to stimulate community interest and participation. Special events such as school assemblies, sports matches, song competitions, interactive drama, and other forums serve to get the message out about immunization.

Some countries and regions have developed very clear messages that are consistently disseminated. In Uganda, the slogan, "A healthy child, a happy family" is used to promote Child Plus Days. In the European region, the message is, "Timely immunization is vital for every child!"; this is translated to a simple slogan, "Prevent. Protect. Immunize." This message and the slogan, plus specific imagery and a variety of draft materials that can be adapted to different languages, are used to create a unifying identity across the participating countries in the region.

To disseminate the messages and other key information about the event, mass media is reinforced by interpersonal and face-to-face channels of communication. These include miking and town criers with megaphones, house-to-house sensitization visits by local community members, talks given in churches or mosques, and walks through the community by community leaders. Print materials are also an important means for disseminating messages and key information. Posters, leaflets, stickers, tee-shirts, and folders are all among the materials that countries have developed to support PIRI-type activities.

With the wide array of possibilities for communication and social mobilization also come some challenges. One challenge is to select strategically the channels that will best reach and be most meaningful to the particular groups targeted by the PIRI activity. A second challenge is to develop and test the messages and key information; in the interests of time and with the desire to please multiple officials and partners supporting the intensification activity, there may be a tendency to overlook this critical step. In countries where the PIRI activity includes a service delivery component, a third challenge is to ensure that messages do not focus solely on the intensified activity, and instead, consistently use PIRI as an opportunity to promote routine immunization. For example, promotional materials for Uganda's Child Plus Days highlight the message, "Remember! Child Days do not replace the usual routine health activities but rather strengthen them."

In countries where PIRI activities include a service delivery component, another communication challenge concerns the correspondence between the messages to community members and the services they will actually receive during the event. For the sake of brevity, messages may call for parents to bring their children up to the age of five or six years old to receive multiple services. But as mentioned above, vitamin A may be given to children up to the age of six while immunization is given only up to the age of one or two years. Therefore health workers and volunteers must be prepared to clarify this situation to caregivers waiting in line.

## COMMON ISSUES AND OBSERVATIONS ACROSS PIRI-TYPE ACTIVITIES

### COMMUNICATION AND SOCIAL MOBILIZATION

- A wide variety of materials and channels have been used to promote PIRI activities. One challenge is to systematically and strategically select the channels that are most effective for communicating with hard to reach or resistant populations.
- In most Child Health Days or activities with a strong service delivery component, communication messages focus on the event itself and services provided during it, without promoting the need for routine immunization
- When multiple health interventions are provided during a PIRI activity, health workers and volunteers must be trained on how to clearly communicate which children are eligible for each intervention.
- Post-event reviews can include finding out where and how the most critical target groups received their information. By doing so, planners can decide which channels and messages are most important to use in the future.

Furthermore, if health workers screen children for their vaccination history, as encouraged above, it is possible that some children will be deemed ineligible for additional immunization—if they are fully immunized or have received all vaccines for which they're eligible at that time. This scenario argues in favor of PIRI activities that offer multiple health interventions so that all caregivers and children who participate receive some service for their efforts.

## IMPLICATIONS FOR ACTION

- ✓ Develop a communication strategy that jointly supports both the periodic intensification activity and routine immunization. Use existing reports, assessments, and immunization data to identify the highest-risk groups to focus on during the PIRI activity.

---

- ✓ Learn about the needs and characteristics of the highest-priority target groups. If possible, conduct formative research to identify the major barriers to immunization that they face and the most appropriate strategies to address them. Identify the channels and sources of information that they find most credible and accessible. Take advantage of multiple sources of data, such as Demographic and Health Surveys, assessments or project documents from other health and development projects, and other sources of information.

---

- ✓ As part of overall planning for the PIRI activity, develop a plan of action for communication and social mobilization that includes a budget, timetable, and assignment of responsibilities. This will help ensure that demand creation activities are synchronized and coordinated with the service delivery activities.

---

- ✓ Design and pre-test messages that convey key information, specific actions, and the benefits to those who take the actions. Disseminate these through a mix of channels in order to increase exposure and reinforce the same messages.

---

- ✓ Prepare a reference sheet with the key messages and orient health workers, volunteers, politicians, and media outlets on the key messages, and give them the opportunity to practice giving the messages. Also prepare a list of frequently-asked questions with correct responses so that health workers and others can field questions that caregivers may have.

---

- ✓ Publicly recognize the contributions of groups and individuals who have contributed to the intensification activity. This will help build a lasting relationship that will facilitate enlisting their support for future immunization activities, either routine or periodic intensification.

---

- ✓ During or following the PIRI activity, conduct formal or informal surveys on how members of the target audience received and interpreted information about the event. This will help refine decisions about which communication messages and channels are most effective and therefore most worthy of time and resources in subsequent PIRI activities.

---

## 4

## USING PIRI AS AN OPPORTUNITY TO STRENGTHEN ROUTINE IMMUNIZATION

While periodic intensification activities have the potential to either strengthen or disrupt routine immunization services, experience suggests that their impact on routine immunization will be favorable only if that is an expressed goal in planning the PIRI activity. There are many ways this goal can be accomplished, several of which have been noted previously in this document. These may include the following (Table 2); although not exhaustive, this list can serve as the basis for generating additional possibilities that may better suit a particular context.

Program Issue	Potential actions
<b>Increase Support for Routine immunization</b>	<p>Use visibility of PIRI activities to advocate for political and community support for routine immunization as a health priority and secure financial support for routine immunization.</p> <p>Increase contact with the media to improve their understanding the importance of routine immunization and elicit commitment to report on it regularly, accurately, and responsibly.</p>
<b>Communication and Social Mobilization</b>	<p>During and prior to the PIRI activity, communicate to caregivers through multiple communication channels that the event does not take the place of routine immunization.</p> <p>Prior to the PIRI activity, train health workers and volunteers to provide caregivers with messages encouraging them to bring their child's health card to the event, and to inform them when and where to obtain routine immunization and other services for their families.</p> <p>Following the PIRI activity, review experience with communication to identify the most effective messages and channels for reaching different segments of the community. Apply these same channels in planning for routine immunization.</p> <p>Discuss with volunteer groups or trusted spokespersons involved in the PIRI activity the ways in which they can support routine immunization on an on-going basis.</p>

Table 2: Opportunities for using PIRI to strengthen routine immunization

Program Issue	Potential actions
Reaching the Hard to Reach	<p>Take advantage of the resources available for the PIRI activity to identify hard-to-reach groups, analyze their unique traits and needs for services, and identify the most effective ways of reaching them with information and services.</p> <p>Following the PIRI activity, plan for continued communication with hard-to-reach groups so as to maintain credibility of the health system and reinforce the need for routine immunization.</p>
Recording and Reporting Vaccine Doses Administered	<p>During PIRI planning, place emphasis on training and supervision activities to screen children for their vaccination status and record doses administered, both on the tally sheet (by age group) and on the child health card.</p> <p>Label reporting forms to indicate that the doses recorded on the form were administered during the PIRI activity, not through routine services.</p> <p>Following the intensification activity, use the data on reporting forms to estimate the contribution of the PIRI event to <b>routine immunization</b> coverage.</p>
Improve Immunization Planning	<p>Immediately following the PIRI activity, systematically analyze the different programmatic elements of the event and their implications for routine immunization as well as for the next PIRI activity.</p> <p>Incorporate the PIRI activity into annual planning templates, budgets, and microplanning processes. Identify the population groups that are particularly important to reach through PIRI activities as opposed to through routine services and estimate the target for number of doses to administer through each service delivery strategy.</p>
Supplies and Logistics	<p>Use the intensified planning for PIRI activities to update inventories of vaccines and other supplies and improve stock management practices.</p> <p>Retrieve from health facilities the excess stocks left over after the PIRI event. Return them to district level for redistribution as needed for routine immunization services.</p>

## 5

## CONCLUSIONS

A great many countries have carried out activities to periodically intensify routine immunization, and the number of countries doing so continues to grow. Health officials, government leaders, and development partners perceive benefits to conducting accelerated or intensified activities on a regular basis. In many instances, these benefits support the delivery of multiple health interventions, while in other circumstances, they are specific to increasing the demand for, or supply of, immunization services. Given the tremendous diversity of experiences and the lack of systematic evaluation, it is extremely challenging to draw conclusions that are both specific and broadly applicable. A few observations, however, can be noted.

Most PIRI activities fall into two basic categories: (i) those with a strong service delivery component, and (ii) those whose main purpose is to build political and community support for routine immunization. In the former category, the intensification activities usually include multiple health interventions and are found mostly in settings with weak health infrastructures that cannot reliably provide primary health care services to all populations on a daily or weekly

basis. Other countries with stronger health infrastructure conduct very specific vaccination activities, such as targeting cross-border areas, introducing a new vaccine, or reaching underserved ethnic groups.

Countries with a higher level of health infrastructure tend to focus their intensification activities on building community and political support for immunization, addressing specific obstacles to the use of available services, or in some countries in the Americas, augmenting disease surveillance activities. The design and implementation of these events has evolved from year to year as experience is gained and health officials identify particular objectives for the activities—for example, building media support or introducing new vaccines to particular populations.

These experiences have not been systematically or critically evaluated.

Documentation varies widely across countries, often taking the form of a description of the event, guidelines for implementing it, and a comparison of numbers of doses given during the event against the target population for the event. Generally, there is very limited systematically-collected data about the impact of the events on routine immunization, and in particular, their contribution to increasing immunization

coverage in children under one. Also not known is their impact on the ability of countries, especially those with fragile health systems, to continue to plan and manage routine immunization services.

In countries providing immunization and other health interventions during their PIRI activities, two broad areas emerge as requiring additional attention: management of supplies and logistics, including assuring injection safety and safe sharps waste disposal, and management of immunization data.



Photo courtesy:  
Femi Oyewole, WHO



If the objective of carrying out PIRI activities is to protect more children under one, then health officials must ascertain whether more children are being protected by the event or whether the same children are simply receiving multiple doses of vaccines that they had already received. To determine the extent to which the objective of increasing routine coverage in children under one is being met, health workers must screen clients' vaccination history during the event, vaccinate only those who have not previously been vaccinated, and record doses administered on the tally sheet, child health card, and register, with data disaggregated by age category. This is an ambitious undertaking that requires considerable planning, training, active supervision, and follow-up in terms of subsequent reporting of coverage.

In terms of quantitative evaluation, the indicators to track should be a function of the goal of the event. If the goal is to raise public awareness about the value and importance of immunization, then in terms of coverage, one would expect to see a sustained increase in coverage for several months (or longer) following the event. If the goal is to temporarily augment service delivery or complement routine immunization services, then one would expect to see a temporary increase in the numbers of doses of vaccines given during the months of the event compared to other months.

Periodic intensification of routine immunization is viewed by many countries as playing an important role in delivering health services to their populations. These activities have yielded great achievements in a wide range of situations. It is encouraged to deliberately use them as an opportunity to strengthen routine services. However, more evaluation of PIRI activities is needed to determine their contribution to routine immunization coverage, and develop a deeper knowledge-base of country experiences and challenges in order to design solutions that can maximize the effectiveness and efficiency of PIRI events.

