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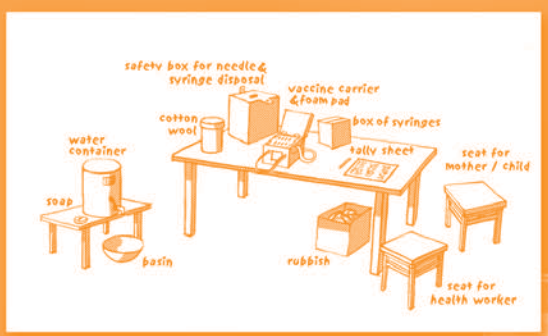
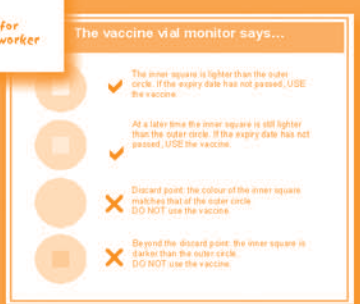
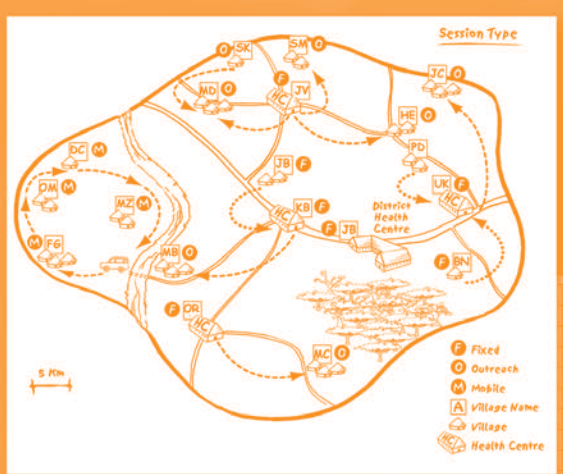
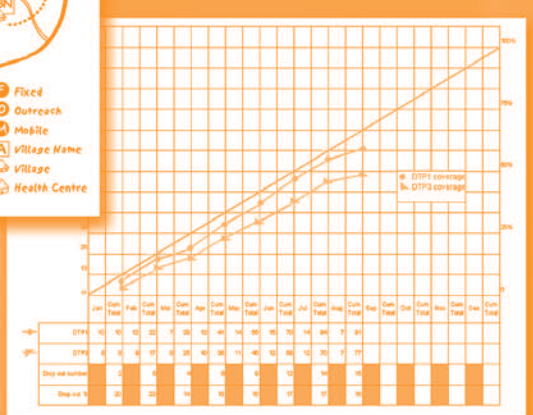
Training for mid-level managers (MLM)

6. Making a comprehensive annual national immunization plan and budget









- *Analyse data*
- *Interactive problem-solving*
- *Combine and integrate*
- *Check completeness and prioritize*
- *Make an activity timeline and budget*
- *Review the entire plan*

Immunization, Vaccines and Biologicals

World Health Organization

Training for mid-level managers (MLM)

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

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Introduction to the series

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

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

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

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

Modules in the mid-level managers series

Module 1 : Cold chain, vaccines and safe-injection equipment management
Module 2 : Partnering with communities
Module 3 : Immunization safety
Module 4 : Supportive supervision
Module 5 : Monitoring the immunization system
Module 6 : Making a comprehensive annual national immunization plan and budget
Module 7 : The EPI coverage survey
Module 8 : Making disease surveillance work

[1] *Immunization in practice : A practical guide for health staff. Geneva*, World Health Organization, 2004.

Acknowledgements

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

Contents

Abbreviations and Acronyms

The following abbreviations have been used in this document.

AD	auto-disable (syringe)
BCG	bacille Calmette-Guérin (vaccine)
DT	diphtheria–tetanus (vaccine)
dT	children's dose of diphtheria and tetanus toxoids
DTP	diphtheria–tetanus–pertussis vaccine
EEFO	earliest expiry first out
EPI	Expanded Programme on Immunization (WHO)
HepB	hepatitis B vaccine
Hib	*Haemophilus influenzae* type b (vaccine)
ILR	ice-lined refrigerator
JE	Japanese encephalitis
MMR	measles–mumps–rubella vaccine
MR	measles–rubella vaccine
OPV	oral polio vaccine
Td	tetanus and diphtheria toxoids with reduced diphtheria content for adults
T-series	tetanus-containing vaccines
TT	tetanus toxoid
VVM	vaccine vial monitor
WMF	wastage multiplication factor
YF	yellow fever

Introduction to Module 6

Purpose of this module

As a mid-level immunization manager, how many annual plans do you have? Do you have several different plans, perhaps one for each initiative: a polio plan, a measles plan, a new vaccine plan, a cold-chain plan? How can you focus on the common ground that the various initiatives share? How complete is a plan? How will you know if some strategies or activities are missing? What is the best way of reviewing last year's progress before making a new annual plan?

This module is intended to take the mid-level manager through the necessary steps towards a comprehensive annual plan. It is organized by component of the immunization system rather than by immunization initiative. Interactive analysis and joint problem-solving are encouraged. There is a separate section on attaining hard-to-reach populations and a checklist from the Global Immunization Vision and Strategy to help ensure that the plan is sufficiently complete and forward-looking. The module describes methods for making a comprehensive annual national immunization plan consistent with the comprehensive multi-year plan for the country.[1] It is assumed that planning takes place at the beginning of the year on the basis of data from the previous year and that the comprehensive multi-year plan will set the strategic direction for the country, with the annual plan providing details.

This module is written for national and provincial staff, i.e. first and second level (not third district level, which is dealt with in other microplanning guidelines). It proposes that the starting point for making an annual plan is a national-level meeting at which all immunization initiatives (for example, polio, measles, maternal and neonatal tetanus, new vaccines, surveillance, logistics, cold chain and immunization safety) are represented. The performance of each district should be analysed as a basis for problem-solving, and, when problem-solving activities have been identified, they should be combined and integrated to make the plan as efficient as possible.

The output of annual planning should be a list of activities, with timelines for the current year, the names of those responsible for implementation and the budget required.

To complete this module, you will need:

- the previous year's immunization data by district
- the previous year's annual plan and other relevant annual plans
- the current and other relevant multi-year plans.

[1] *WHO-UNICEF guidelines for developing a comprehensive multi-year plan (cMYP),* WHO/IVB/05.20.

This module is organized into: data analysis, interactive problem-solving, combination and integration of activities, checking completeness and setting priorities, drawing up an activity timeline and budget, and reviewing the entire plan.

1. Analyse data: Analyse the previous year's coverage and surveillance data for all districts, and group districts into performance categories.
2. Interactive problem-solving: Review major problems associated with groups of districts and propose solutions in the form of activities to be included in the current year's plan.
3. Combine and integrate activities: Combine and integrate planned problem-solving activities to avoid duplication and overlap.
4. Check the completeness of activities and set priorities: Check the completeness of planned activities and strategies with the Global Immunization Vision and Strategy 2006–2015, current regional goals and the strategy for reaching every district (RED).
5. Make an activity timeline and budget: Create a timeline for the year's activities, describing the location, timing, responsibilities and costs for all planned activities.
6. Review the entire plan: The final step will be to review the plan to ensure that national priorities have been addressed and resources have been allocated according to priority.

Analyse data > **Interactive problem-solving** > **Combine and integrate** > **Check completeness and prioritize** > **Make an activity timeline and budget** > **Review the entire plan**

1. Analyse data

1.1 Analysis of the previous year's coverage and surveillance data

Annual planning should start with a review of coverage and surveillance data from all districts, which will provide information on the status of performance and will be used to group districts by priority.

Complete all the columns in Table 6.1 with data from the previous calendar year:

1. Column a: List all districts in the country (or province).
2. Column b: Give the target population (e.g. infants).
3. Columns c–f: Give the doses of vaccine administered by antigen (diphtheria toxoid, tetanus toxoid and pertussis vaccine (DTP)1, DTP3, measles, tetanus toxoid (TT2+)).
4. Column g: Give number of reported measles cases.
5. Column h: Give number of reported cases of maternal and neonatal tetanus.
6. Columns i–l: Give coverage by antigen (DTP1, DTP3, measles, TT2+).
7. Columns m–n: Give numbers of persons not immunized, by antigen (DTP3, measles).
8. Column o and p: Give drop-out rates (DTP1–DTP3 and DTP1–measles).

1.2 District performance categorization

1. Sort number of unimmunized with DTP3 in ascending or descending order; take the middle entry as the median.
2. Column q: Assign category A, B, C or D to each district according to performance:

   A, coverage greater than 80% and unimmunized less than the median

   B, coverage less than 80% and unimmunized less than the median

   C, coverage greater than 80% and unimmunized greater than the median

   D, coverage less than 80% and unimmunized greater than the median

District performance categorization

	Coverage greater than 80%	Coverage less than 80%
Number of unimmunized less than the median	A districts	B districts
Number of unimmunized greater than the median	C districts	D districts

Step 1 Notes

- A full set of coverage data for the previous calendar year or for a full 12-month period must be available for each district. Reported cases of measles and neonatal tetanus should be included even if the reports are not 100% reliable.
- For the analyses of coverage, unimmunized populations and drop-outs, any antigen can be selected, depending on the national situation. DTP1 gives an indication of access, as it is the first in the series and usually given at district health centres (unlike BCG, which may be given at birth in a hospital). DTP3 gives an indication of the use of services, and measles vaccine gives an indication of full immunization.
- A national map displaying the districts according to category would be useful at this step.

Table 6.1 Data analysis

Area details		**Doses of vaccine administered**				**Cases reported**		**Immunization coverage (%)**				**Unimmunized (No.)**		**Drop-out rates (%)**		**Category**
District name	Target popula-tion	DTP1	DTP3	Measles	TT2+	No. of Measles cases	No. of MNT cases	DTP1	DTP3	Measles	TT2+	DTP3	Measles	DTP1-DTP3	DTP1-Measles	A, B, C,D
a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q

This table is different from those in previous WHO documents and is suitable for analysis at the national or province level. The table given in *Immunization in practice*[1] is more suitable for the district level.
Sort number of unimmunized (DTP3) in ascending or descending order, and take the middle as the median

[1] *Immunization in practice: A practical guide for health staff.* Geneva, World Health Organization, 2004..

2. Interactive problem-solving

Review major problems associated with groups of districts, and propose solutions to the problems in the form of activities to be included in the current plan (group work). After the full data analysis in Step 1, with districts classified into performance groups, Step 2 requires an analysis of the problems associated with groups A, B, C and D districts, according to each of five immunization system components. This step is best carried out in an interactive way as group work. Groups should be composed of representatives of various provinces or districts and those responsible for each immunization system component.

For a national plan, the problems of groups of districts should be analysed. It is not necessary to analyse the problems of individual districts, which can be done at district level and in microplanning workshops. The problem-solving activities listed should be implemented at national (or provincial) level.

2.1 Group work to review problems associated with groups of districts

1. Once the groups of districts A–D have been identified, the next stage of planning can be conducted in an interactive workshop, by assigning participants to discuss problems and solutions for groups of districts.
2. Divide the participants into group A–D district planners.
3. Ask each group of participants to draw up a list of problems for their group of districts according to immunization system component (Table 6.2).
4. Ask each group to propose solutions to the problems listed. Encourage them to be innovative but realistic, as the solutions to problems must be in the form of activities that can be implemented in the annual plan.
5. Bring groups A–D back to a plenary discussion to complete Step 3, which involves combining and integrating planned activities.

Step 2 Notes

- Step 2 provides an opportunity to identify common problems in immunization initiatives and to solve them together. Therefore, the problems should be analysed by system component and not by disease or initiative.
- This step is also a good opportunity to propose activities for reaching unimmunized populations, especially those who are hard to reach, and for discussing initiatives for several diseases (polio, measles, maternal and neonatal tetanus) for joint action. Special planning considerations are discussed in section 2.2.
- As real data are used to group districts according to performance, real problems must be identified, and the solutions must be feasible.

The following lists of actions can serve as reminders for problem-solving. The list is an example only and is not exhaustive.

1. Service delivery

Ensure that:

- All areas of the country are reached regularly.
- There is adequate support for outreach sessions to be carried out as scheduled and that this is monitored.
- All districts have received training in the RED strategy.
- There are adequate strategies for reaching the urban poor.
- Polio, measles and maternal and neonatal tetanus staff meet regularly to coordinate surveillance and immunization activities.
- Newly introduced vaccines are available equitably to the whole population at all health facilities.

2. Linking services with the community

Ensure that:

- There is a national communication plan with strategies to improve immunization uptake.
- National volunteer groups, influential community leaders and community mobilizers are systematically involved.
- Communities in areas with low coverage are engaged in planning and linked with service-delivery strategies.

3. Vaccine supply, quality, logistics, cold chain

Ensure that:

- There is a cold-chain inventory.
- There is a plan to upgrade or rehabilitate the cold chain in preparation for the introduction of a new vaccine.
- Information on vaccine stocks is freely available.
- There is a plan to improve supply to areas where vaccine stock-outs are a problem.
- There is an effective system for packaging auto-disable syringes with vaccine.

4. Surveillance and monitoring

Ensure that:

- A reliable system for monitoring district immunization system performance is in place.
- Areas with poor reporting are identified and have support.
- Supervisors make regular planned and scheduled supervisory visits.
- National population figures are available and accurate.

- Measles and maternal and neonatal tetanus cases are identified through active surveillance.
- Surveillance is expanded for diseases covered by new vaccines.
- A surveillance system for adverse events following immunization is functional.
- Ensure zero reporting if there are no cases.

5. Programme management
Ensure that:

- All districts have annual microplans.
- Action is being taken to fill all staff positions.
- Training materials are up to date.
- A group of national supervisors is available for supportive supervision.
- Funds are being received and disbursed on time at district level.

Table 6.2. Examples of interactive problem-solving by system component for groups of districts

Note: National level may also refer to province level in large countries.

System component	Group A problems	Group A solutions and activities for national level
Service delivery	High reported coverage might be unreliable.	Health workers make local population head counts to ensure that denominator and target population are accurate.
Vaccine supply, quality, logistics, cold chain	Regular auto-disable syringe stock-outs reported.	Ensure vaccine and auto-disable syringes packaged together at point of supply.
Linking services with the community	Some communities not accepting TT immunization.	Meet with communities to determine barriers and how to address them, and provide information on services.
Surveillance and monitoring	Adverse events not reported.	Provide training on monitoring and investigating adverse events.
Programme management	Decentralization has affected availability of funds for immunization.	Advocate for benefits of immunization with local politicians and administration.

System component	Group B problems	Group B solutions and activities for national level
Service delivery	Some districts have no access during rainy season.	Develop district catch-up plans for dry season.
Vaccine supply, quality, logistics, cold chain	Current incinerator network inadequate.	Identify strategic locations of incinerators.
Linking services with the community	Community not represented during immunization sessions in most districts.	Conduct microplanning with community members to identify and train mobilizers to work with health staff.
Surveillance and monitoring	Outbreak of measles despite high reported coverage.	Investigate and document outbreak for e.g. age and immunization status.
Programme management	National supervisors rarely visit province or district level.	Jointly plan supervisory schedule with an agenda of topics to be discussed.

System component	Group C problems	Group C solutions and activities for national level
Service delivery	High drop-out level in rural areas.	Work with districts concerned to review and improve session plans and workplans.
Vaccine supply, quality, logistics, cold chain	Some cold-chain equipment needs replacing.	Provide inventory and details of requirements to national level.
Linking services with the community	Some minority communities not using services.	Determine barriers and develop advocacy strategy (linked with service delivery to ensure that services are available).
Surveillance and monitoring	Poor-quality completeness and reporting from districts.	Provide supportive supervision on improved surveillance and monitoring.
Programme management	Funds for outreach per diem irregular.	Review budget with districts concerned to improve financial planning.

System component	Group D problems	Group D solutions and activities for national level
Service delivery	Some remote areas can be reached only a few times per year.	Plan with other departments to design a package of interventions by integrated mobile team.
Vaccine supply, quality, logistics, cold chain	Difficult to provide power and maintenance for refrigerators.	Design vaccine supply, distribution and session plan with cold boxes and strategically located refrigerators.
Linking services with the community	Outreach planned and conducted but poorly attended.	Plan meetings with communities and use mobilizers to assist with communication before and during outreach visits.
Surveillance and monitoring	Maternal and neonatal tetanus cases reported from several districts.	Ensure case investigation and plan strategies for reaching pregnant women.
Programme management	Difficult to provide adequate staffing levels for some districts.	Discuss an incentive scheme for health staff.

2.2 Planning for hard-to-reach populations

The sections on data analysis and problem-solving indicate that there are districts with populations who are difficult to reach, and the national plan should include activities that will facilitate access to these populations. The detailed activities must be included in district and health-facility plans ; however, supportive national activities should be included and budgeted for in the national plan. Table 6.3 suggests ways of identifying and reaching such populations. Hard-to-reach populations will also benefit from packages of interventions integrated with immunization, and Table 6.3 indicates how to initiate the necessary planning steps.

Who are the hard-to-reach ?

While unreached populations are usually found in low-performing (D category) districts, this is not always the case. Populations can be hard to reach for a variety of reasons.

1. *Geographical considerations :* Some segments of the population (mostly rural) have little contact with routine immunization services, because they live in areas too far from the health service, or because they are seasonally mobile, e.g. nomadic populations. What constitutes 'too far' should be defined by local managers on the basis of available financial and human resources. This might be any area that cannot be reached by health-facility staff with the combined resources of the health facility and the district.
2. *Urban considerations :* There are urban populations living in areas not far from services but who do not make contact with them for a variety of reasons, including lack of awareness and fear of eviction. This group includes but is not limited to slum dwellers and squatters.
3. *Socioeconomic considerations :* Societies include minority groups who do not use government health services for social, economic or political reasons. One social reason might be reluctance to access health services because of religious or traditional beliefs. The economic reasons might include the fact that daily wage earners lose a day's pay if they have to stand in a queue at a health facility. In areas in conflict, contact between health staff and the community can be limited by poor security.

Planning activities for the hard-to-reach

Use Table 6.3 to identify hard-to-reach populations. Are there opportunities to deliver other interventions at the same time as immunization (for example bednets, nutritional supplements and de-worming) ?

Activities required to reach hard-to-reach populations

Special delivery strategies:

- *Campaign approach:* Mobile teams visit a number of locations over a short period, four or more times a year.
- *Urban planning:* Visit and map slum areas and squatter settlements, and set up convenient temporary immunization posts.
- *Nomadic populations:* Provide services at places where nomadic populations make regular stops.
- *Conflict areas:* It may be possible to negotiate days of tranquillity to deliver services.
- *Temporary services:* Immunization weeks, health camps and temporary sites have all been successful in various countries.
- *Times of sessions:* Especially if many women in your area are working and find it difficult to access services during normal clinic hours, shift the times of sessions.
- *Mobile sessions:* These sessions may require assistance from district or other health-facility staff.

Special support strategies to be initiated at national level:

- advocacy to obtain additional financial resources for hard-to-reach populations;
- transport and communication;
- human resources, with establishment of posts and filling vacant posts;
- technical support for training, planning and monitoring;
- regular supportive supervision.

Integration strategies for outreach:

- Expand surveillance and monitoring for vaccine-preventable diseases to include other diseases and interventions.
- Establish joint planning, supply and logistics with various programmes for outreach.
- Pool resources for outreach transport and communication.

Table 6.3. Planning activities for hard-to-reach populations

Name of district	Target population	Type of hard-to-reach population	Population not vaccinated with DTP3 (target-DTP3)	Target population that is hard to reach (No./%)	Activities to access hard-to-reach populations that need support from national level	Other health interventions that can be integrated with immunization

Notes :

3. Combine and integrate

The purpose of Step 3 is to make the plan as efficient as possible. The starting point is lists of problem-solving activities for groups of districts; the end point will be one list of activities resulting from combination and integration to avoid duplication and overlap. In Step 3, the results of separate group work shown in Table 6.2 and activities for hard-to-reach populations from Table 6.3 are combined and integrated into a single new table (Table 6.4), which will form the basis of the timeline and budget. Step 3 works well if carried out in plenary in the presence of all groups.

3.1 Activities to be conducted at national level by each group

Starting with group A, each group should enter its list of solutions and activities for national level in the first column, in relevant rows by system component, in Table 6.4. If an activity is common to more than one group, this can be shown by an 'X' in the relevant column for the groups concerned.

3.2 Reference to the previous year's plan

At this stage, the previous year's planned activities should be reviewed. For incomplete activities or those still in progress, decide which need to be carried over to the current year. Decide whether some activities have been completed and need not be included in the current year's plan.

3.3 Reference to the comprehensive multi-year plan

Having made a list of new activities for the current year, refer again to the comprehensive multi-year plan, and review the strategies and activities. The multi-year plan will include new activities scheduled to start in the current year, which should be added if appropriate. These might include activities for the introduction of new vaccines.

Decide which of the incomplete activities or those still in progress from the previous year should be carried over to the current year and whether some activities have been completed and no longer need to be included.

3.4 Avoiding duplication and overlap

Having established a complete list of problem-solving activities and having carried over activities and newly planned activities to the first column of Table 6.4, the next step is to combine and integrate this list of activities to avoid duplication and overlap.

- Some activities will be common to more than one group of districts within the same system component (for example, improving the quality of microplanning for all districts as part of service delivery).
- Some activities will be common to more than one system component (for example, training courses for district staff, which can include several topics on the curriculum).
- Some activities can be integrated with other programmes, such as the delivery of bednets within the malaria control programme. For each combined activity, indicate the groups of districts concerned.

Step 3 Notes

- Step 3 is vital to ensuring that the country has one, comprehensive, annual immunization plan, rather than several separate plans. The key issues are:
  - planning by immunization system component, as opposed to planning by separate initiative;
  - combining related activities as much as possible;
  - setting priorities by consensus;
  - ensuring that various activities lead to achieving common milestones.
- Duplication can occur when training opportunities are repeated for various initiatives. For example, a maternal and neonatal tetanus workshop and a new vaccine workshop are both planned. If the audience is the same, as is likely at district or even provincial level, the organizers of the workshops should review the agenda together to see how the training opportunity could serve both purposes.
- Overlap can occur, for example, when evaluations of a new vaccine and of injection safety are planned at separate times in the same year. Often, data can be collected in one evaluation to serve several purposes if there is close cooperation in planning. Overlapping activities may appear under separate immunization components unless the whole plan is reviewed to consolidate them.

3.5 Annual planning for introduction of new vaccines

The *Global Immunization Vision and Strategy 2006–2015* (see Annex 1) encourages countries to consider the introduction of new vaccines appropriate to their needs. A series of steps should be taken at national level before a decision is made, after which the strategies and activities for all levels must be included in the annual comprehensive immunization plan.

Introduction of a new vaccine is a good opportunity to review and rejuvenate the whole immunization system.

There is much overlap between the activities needed to introduce a new vaccine and those required to improve the system as a whole. The introduction of a new vaccine may attract new short-term and long-term resources; however, the real challenge is to ensure that the resources are put to good use to strengthen the system as a whole. The aim of this section is to identify ways to integrate introduction of new vaccines into annual planning at national and mid-level in order to avoid duplication and make the best use of resources.

System component	Activities to introduce a new vaccine	Shared activities
Service delivery	Revise tally sheets, registers, reports, cards and others to include doses of new antigen.	Take opportunity to review all immunization reporting instruments.
	Train immunization staff on introduction of the new vaccine.	Make a schedule of training sessions and supportive supervisory visits to integrate all priority issues that need reviewing or refreshing.
Vaccine supply, quality, logistics, cold chain	Review status of cold chain, to assess capacity to store new vaccine.	Assess cold chain and order new or replacement equipment nationwide.
	Review supply and logistics plans to include the additional volumes of vaccine, syringes, safety boxes, waste-disposal containers and other material that introduction of the new vaccine will require.	Review and improve the vaccine and supplies packaging strategy, waste management and transport needs.
Linking services with the community	Design communication materials that explain the needs and promote uptake of the new vaccine.	Schedule meetings with the community to inform it about all benefits of immunization.
	Ensure maximum access to and use of the new vaccine.	Take the opportunity to revise session plans, and encourage follow-up of defaulters.
Surveillance and monitoring	Include coverage of new vaccine as an indicator.	Promote the use of monitoring charts.
	Ensure that surveillance system includes syndromes or diseases addressed by the new vaccine.	Enhance active surveillance, review adequacy of surveillance and laboratory network.
	System for addressing vaccine-specific adverse events following immunization.	Enhance existing system to address adverse events following immunization.
Programme management	Regular supervision at follow-up visits to solve problems with introducing the new vaccine.	Use supervisory visits to follow-up on problems in the immunization system.
	Ensure appropriate use of available funds to cover the costs of activities.	Ensure adequate funds are available at district level to support district microplans.
	Evaluate new vaccine introduction.	Include all immunization system components in the evaluation.

Table 6.4. Combined and integrated list of planned activities

Activity	Group				Combined and integrated activites	Priority (High (H), medium (M) or low (L))	Milestones
	A	B	C	D			
Service delivery							
Vaccine supply, quality, logistics, cold chain							
Linking services with the community							
Surveillance and monitoring							
Programme management							

Copy into the timeline (step 5)

4. Check completeness and prioritize

Having developed a list of combined and integrated activities in Step 3, Step 4 will ensure that no activities have been overlooked. By referring to the Global Immunization Vision and Strategy 2006–2015, the regional goals and the RED strategy, it will be possible to check whether the activities are complete. When this has been done, recognizing that it might not be possible to implement every activity in the year, it will be necessary to assign an order of priority to each activity.

4.1 Checking completeness of activities and strategies

Global Immunization Vision and Strategy 2006-2015

The Global Immunization Vision and Strategy was approved by the Fifty-eighth World Health Assembly in May 2005. The Strategy consists of four areas, 24 strategies and key activities. Planners should take the time to review the strategies and activities and then to add those that have been overlooked. (The strategies are listed in Annex 3 of the comprehensive multi-year plan[1] guide).

Step 4 Notes

- The Global Immunization Vision and Strategy contains a full list of strategies and activities, all of which are appropriate to a forward-looking multi-year plan. An annual plan will require only those activities that are appropriate to the current year.
- Although some strategies, such as linking immunization with other health interventions, introducing a new vaccine and strengthening laboratory networks, will require decisions, consultation and specialized knowledge outside the scope of the immunization manager, some steps can be taken at mid-level (see below).

Regional goals

Review regional-level goals and priorities. Ensure that the annual plan includes activities to reach these goals.

[1] *WHO-UNICEF guidelines for developing a comprehensive multi-year plan (cMYP),* WHO/IVB/05.20.

The strategy for reaching every district (RED): roles and responsibilities

The RED Strategy consists of five operational components that are needed to ensure that every infant in every district is reached on a regular basis. To achieve this, much of the action should take place at district and health-facility level, but activities are also needed in the national plan; Table 6.5 gives examples of RED activities at each level.

Table 6.5. RED roles and responsibilities at each level

RED operational component	National level	District level	Health-facility level
Re-establishing outreach	Commit to reaching the unreached. Explore packages of interventions.	Identify unreached populations and formulate microplans to reach all.	Ensure planned outreach sessions are implemented.
Supportive supervision	Train a core of supervisors. Provide resources for follow-up visits.	Prepare a supervisory schedule for all health facilities.	Maintain supervisory log book.
Linking services with communities	Advocate for immunization and involve communities through community mobilizers and media.	Support health-facility staff in establishing regular dialogue with community.	Meet community leaders and volunteers on a regular basis and involve them in planning and feedback.
Monitoring and use of data for action	Establish national database and system to monitor coverage in all districts. Review district performance and set priorities.	Establish a district system to aggregate and review monthly health-facility reports. Hold regular meetings with health-facility staff.	Ensure complete and timely reporting to the district.
Planning and management of resources	Review progress and update national plan annually. Ensure sufficient vaccines and supplies are available for all districts. Make funds available to priority districts to implement microplans.	Prepare district microplans on the basis of health-facility workplans. Ensure priorities are met. Ensure regular distribution of vaccines and supplies.	Update workplan regularly.

Step 4 Notes

For the purposes of the annual national plan, you should ensure that each of the five operational components of the RED strategy is included. The detailed activities for district and health-facility level may not be included in the national plan.

1. Reaching unreached and hard-to-reach populations
Annual planning may be the only opportunity for a country to understand the magnitude and distribution of its unreached population, and within this group the hard-to-reach populations. Step 2 will identify the unreached, but reaching them will need the combined efforts of all immunization initiatives and dialogue with communities.

Does the annual plan show how the unreached will be reached this year?

2. Linking immunization with other health interventions
In many countries, there has been much progress in linking immunization with malaria, nutrition and de-worming interventions in an 'outreach package'. The progress is sometimes due to intermittent campaigns, planned separately. To make sustained progress, there should be regular coordination and cooperation among the various departments to plan logistics together, especially for outreach.

Does the plan show what immunization services should do to deliver an integrated 'outreach package' in places where it is needed?

3. Providing immunization beyond infancy
Booster doses and school immunization are examples of how immunization can be provided beyond infancy. Ensuring good coverage for older groups requires special planning and management.

For those countries with booster or school immunization, does the annual plan show how immunization beyond infancy will be monitored and managed?

For those countries not yet implementing booster or school immunization, does the annual plan include some steps towards these immunization opportunities?

4. Immunization campaigns
A comprehensive annual immunization plan should include all disease-specific campaigns planned for the year. Detailed planning for campaigns may have to be done separately; however, each campaign (e.g. elimination of measles and maternal and neonatal tetanus) offers opportunities to improve the components of the immunization system. Therefore, opportunities in preparing for a campaign, including training, advocacy, cold chain, surveillance and evaluation, should be incorporated into the comprehensive annual plan.

Are proposed campaigns (national or sub-national) included in the plan?

Have the planning steps been consolidated into various system components?

4.2 Assigning priorities

Step 2 will have resulted in a long list of activities, covering all areas of work. It is essential to set priorities in order to prepare a realistic list that can be used within the timeline and budget of the annual plan.

For each activity in Table 6.4, assign a priority (high, medium or low). This should be discussed in plenary to achieve consensus on national priorities; for example, an activity that concerns all groups of districts might be given priority over others, or an activity that will affect districts with the highest number of unimmunized persons might be given priority.

4.3 Reviewing national milestones

In the last column, list all national milestones (taken from the comprehensive multi-year plan or other multi-year plans). Check that the milestones will be met by the planned activities, and check whether certain milestones have been neglected or inadequately addressed.

5. Make an activity timeline and budget

5.1 Creating a timeline for annual activities, with location

The purpose of Step 5 is to convert the list of activities in Table 6.4 into a useable workplan in Table 6.6. To do this, dates, responsibilities, and a budget must be added. Take the list of combined and integrated activities, with groups and priorities, and put it into Table 6.6. Note that, when completed, Table 6.6 can be used as an annual national workplan.

Timing of activities

The timing of activities may be set by several factors:

- high priority (e.g. a serious problem of stock-out must be solved urgently);
- opportunity (e.g. a measles campaign has already been scheduled);
- seasonal factors (avoiding the rainy season);
- other factors (e.g. availability of key staff);
- monthly continuous activities.

Responsibility for activities

This is an opportunity to show how activities will be carried out by cooperation among various units or initiatives.

5.2 From multi-year budgeting to annual budgeting

Good annual planning, closely linked to budgeting, is essential for monitoring and managing changes and ensuring that enough money is available to support the needs for the planned year.

The budgeting exercise for the multi-year plan is a good starting point for preparing an annual budget for the programme, particularly if a comprehensive multi-year plan is available and its costing tool was used. The figures in the comprehensive multi-year plan show the total budget for each year and broken by cost category. The following steps are suggested for annual budgeting:

1. Review the relevant year in the costing of the comprehensive multi-year plan and make the necessary changes. It is likely that programme elements will have changed from the original assumptions made during multi-year planning. For instance, it would be relevant to review and update the assumptions for immunization coverage, demographic figures, campaign scheduling and logistic needs in the costing tool. This will provide you with up-to-date budgeting figures for your annual plan when it comes to specific inputs, such as vaccines, injection supplies, human resources and logistics.

2. Estimate the budget needs for activities more accurately. The comprehensive multi-year plan costing exercise provides indicative amounts budgeted for activities such as training and surveillance, but these must be estimated more accurately for the annual planning exercise. Place the activity costs in Table 6.6a.

3. The final step is to put together the final budget for the planned year. It is recommended that you use Table 6.6b, to ensure that:
   - the budget for the annual programme is presented comprehensively and includes the budget needs for inputs (e.g. vaccines) and all activities in Table 6.6a;
   - future financing available by source and funding gaps is updated.

Table 6.6a. Annual activity timeline and budget

Activities	Location				Priority	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Unit responsible	Cost $	Funds available		
	A	B	C	D	H/M/L															Govt.	Partners	Shortfall
Service delivery																						
Linking services with the community																						
Surveillance and monitoring																						
Vaccine supply, quality, logistics, cold chain																						
Programme management																						

Table 6.6b. Annual programme budgeting and financing

	Planned financing						
Cost category	**Government**	**GAVI Fund**	**Donor 1**	**Donor 2**	**Donor 3**	**Donor 4**	**Unfunded**
Routine recurrent cost							
Vaccines (routine vaccines only)							
Traditional vaccines (EPI 6)							
New and underused vaccines							
Injection supplies and waste disposal							
Personnel							
Transportation (fuel and vehicle maintenance)							
Maintenance and overheads							
Activity costs (taken from annual workplan)							
Service delivery							
Community links							
Surveillance and monitoring							
Programme management							
Cold chain and logistics							
Subtotal recurrent and activity costs							
Routine capital cost							
Vehicles							
Cold-chain equipment							
Other capital equipment							
Subtotal capital costs							
Campaigns							
Polio							
Measles							
Yellow Fever							
MNT campaigns							
Other campaigns							
Subtotal campaign costs							
GRAND TOTAL							

6. Review the entire plan

6.1 Ensuring that the plan reflects national priorities

Once the draft plan, with timelines, responsibilities and budget, has been prepared, the final step is to review it to make sure that it is as complete as possible and truly reflects the national priorities. Reviewing the following questions may be helpful:

- Have national priorities been addressed adequately in the list of activities?
- Have sufficient resources been allocated to high-priority activities?
- Should low- or medium-priority activities be included in this year's plan and budget?
- Is advocacy and resource mobilization needed to reduce the budget shortfall?

On the basis of this review, certain adjustments might be required in the timeline.

Step 6 Notes

National priorities are determined in the multi-year plan, and annual milestones are included. Now you should review each of the subsequent steps to track whether the priority areas have been addressed appropriately.

Example 1: Improving injection safety is considered a priority because the national milestone was not met in the previous year.

- Does injection safety appear as a problem in the analysis of Step 3, with solutions that apply to the poorly performing groups of districts?
- Has an adequate budget been allocated to injection safety, with responsibilities that involve staff in various national initiatives?

Example 2: Increasing national coverage is considered a priority.

- Does Step 1 identify the districts that contribute most to the unimmunized population? Does Step 1 show the activities for reaching this group of poorly performing districts? Does Step 3 show agreement on how these activities will be carried out?
- Does Step 3 show how activities for poorly performing districts will be consolidated to avoid duplication?
- Does Step 4 show that all possible strategies and activities have been considered to increase coverage?
- Is there an adequate budget and critical mass of responsible staff?
- Does the timeline show that activities to improve coverage will be put in place as a priority?

6.2 Advocating for budget support

A manager might need to advocate for budget support in order to receive sufficient resources for conducting the planned activities. Table 6.7 provides a template for analysing the planned budget for the past year and actual expenditures. This analysis might help managers to justify the budget requirements for the current year and justify why there have been slippages or delay.

Table 6.7. Analysis of planned budget for the past year and actual expenditure

	Last year		Planning year
Cost category	**Planned budget**	**Actual expenditure**	**Planned budget**
Routine Recurrent Cost			
Vaccines (routine vaccines only)			
Traditional vaccines (EPI 6)			
New and underused vaccines			
Injection supplies and waste disposal			
Personnel			
Transportation (fuel and vehicle maintenance)			
Maintenance and overheads			
Activity costs (taken from annual workplan)			
Service delivery			
Community links			
Surveillance and monitoring			
Programme management			
Cold chain and logistics			
Subtotal recurrent costs			
Routine Capital Cost			
Vehicles			
Cold-chain equipment			
Other capital equipment			
Subtotal capital costs			
Campaigns			
Polio			
Measles			
Yellow Fever			
MNT campaigns			
Other campaigns			
Subtotal campaign costs			
GRAND TOTAL			

Annex 1 : Using the Global Immunization Vision and Strategy framework as a checklist (sample table)

Strategies	Key activities	Activity included in the plan			
Strategic area one : Protecting more people in a changing world		Yes	No	Not applicable	New activity needed
Strategy 1 : Use a combination of approaches to reach everyone targeted for immunization.	National commitment to current immunization services through policies and strategies that also include human resources and financial planning.				
	Formulate and implement costed comprehensive multi-year national strategic plans, budgeting and annual workplans based on data analysis and problem-solving.				
	Sustain high immunization coverage, where it has been achieved.				
	Implement national strategies to vaccinate children who were not vaccinated during infancy.				
	Where and when appropriate, include supplementary immunization activities as an integral part of national plans.				
Strategy 2 : Increase community demand for immunization.	Engage community members, non-governmental organizations and interest groups in immunization advocacy and implementation.				
	Assess the existing communication gaps in reaching all communities and develop and implement a communication and social mobilization plan.				
	Provide regular, reliable, safe immunization services that match demand.				
Strategy 3 : Ensure that the unreached population in every district is reached at least four times a year.	Ensure microplanning at the district or local level.				
	Reduce the number of immunization drop-outs (incomplete vaccination) by improved management.				
	Develop and update supervisory mechanisms and tools.				
	Provide timely funding, logistic support and supplies for programme implementation in every district.				
Strategy 4 : Immunize beyond the traditional target group	Define target populations and age groups for immunization appropriate to the national situation.				
	Assess the cost-effectiveness of different schedules and strategies.				
Strategy 5 : Improve vaccine, immunization and injection safety.	Procure vaccines only from sources that meet internationally recognized quality standards.				
	Ensure long-term forecasting for existing and new vaccines by improving vaccine management skills.				
	Ensure national self-reliance in quality assurance and regulatory control.				
	Introduce, sustain and monitor safe injection practices, including use of auto-disable syringes and other safe methods of vaccine administration.				
	Survey and respond to adverse events following immunization.				
	Be responsive to potential vaccine safety issues and address these urgently.				

Strategies	Key activities	Activity included in the plan			
Strategic area one : Protecting more people in a changing world		Yes	No	Not applicable	New activity needed
Strategy 6 : Improve and strengthen vaccine management systems.	Ensure accurate demand forecasting at national and district levels for an uninterrupted supply of quality-assured vaccines, auto-disable syringes and safety boxes.				
	Build capacity for effective vaccine management by training, supervision and information systems.				
	Increase access and coverage through a 'safe chain' that includes taking vaccines beyond the cold chain, using a vaccine management system based on a vaccine vial monitor.				
	Move towards coordinated, sector-wide financing and management for transport and communications.				
Strategy 7 : Evaluate and strengthen the immunization programme.	Conduct regular evaluations at local, district and national levels and provide feedback on performance.				
	Perform operations research and evaluate what works to improve the delivery of immunization and to make systems more effective, efficient and equitable.				
Strategic area two : Introducing new vaccines and technologies		Yes	No	Not applicable	New activity needed
Strategy 8 : Strengthen country capacity to determine and set policies and priorities for new vaccines and techniques.	Strengthen capacity to assess disease burden and cost-effectiveness of new vaccines.				
	Ensure long-term financial commitments from national governments and supporting partners before the introduction of new vaccines.				
Strategy 9 : Ensure effective and sustainable introduction of new vaccines and techniques.	Integrate the introduction of each new vaccine into countries' multi-year sector-wide plans and provide a financial analysis.				
	Ensure adequate training of health workers and vaccine managers.				
	Produce appropriate information, education and communication materials to ensure good understanding of the benefits of new vaccines or techniques.				
	Ensure that within five years of introduction, the coverage of the new vaccine reaches the same level of coverage as that of other vaccines given at the same time.				
	Expand surveillance of diseases prevented by new vaccines.				
Strategy 10 : Promote research and development on diseases of public health importance.	Produce local evidence to influence public and private investments in new vaccines and techniques.				
Strategic area three : Integrating immunization, other linked interventions and surveillance in the health systems contexts		Yes	No	Not applicable	New activity needed
Strategy 11 : Strengthen immunization programmes in the context of health systems development.	Analyse district-wide data regularly to document key factors in the success and failure of immunization activities.				
	Participate actively in collective efforts to shape sector-wide policies and programmes.				
	Use the experience gained in health systems development to position immunization services in a way that ensures the maximum benefit for all people.				
Strategy 12 : Improve human resources management.	Make an inventory of human resource needs.				
	Plan for and provide sufficient, adequately paid, trained human resources.				
	Use supportive supervision.				
	Motivate health workers in inaccessible or insecure areas to reach all eligible populations.				

Strategies	Key activities	Activity included in the plan			
Strategic area three: Integrating immunization, other linked health interventions and surveillance in the health systems context		Yes	No	Not applicable	New activity needed
Strategy 13: Assess and develop appropriate interventions for integration.	Develop and field-test potential joint interventions.				
	Tailor integrated packages of interventions.				
Strategy 14: Maximize the synergy of integrated interventions.	Include joint interventions in multi-year and annual plans.				
	As part of these plans, formulate and implement integrated training.				
	Implement interventions jointly, with special emphasis on outreach and mobile teams.				
	Monitor and evaluate the incremental efficiency, effectiveness and impact of combined interventions.				
Strategy 15: Sustain the benefits of integrated interventions.	Create a management structure that facilitates coordination and efficiency.				
	Advocate for further synergy and explore additional links.				
	Pool the resources needed to cover operational and other costs.				
	Remain attentive to community-perceived needs.				
	Establish joint financing, monitoring and evaluation.				
Strategy 16: Strengthen monitoring of coverage and case-based surveillance	Expand the existing surveillance systems (such as for polio and measles) to achieve effective case-based surveillance for vaccine-preventable diseases.				
	Improve monitoring of coverage of vaccines and other linked health interventions.				
Strategy 17: Strengthen laboratory capacity by creating laboratory networks.	Expand existing laboratory networks.				
	Ensure training, equipment, reagents and quality control.				
Strategy 18: Strengthen the management, analysis, interpretation, use and exchange of data at all levels.	Improve data management by regular training, monitoring and feedback at the local level.				
	Regularly review district indicators of performance.				
	Develop better tools (e.g. computer software) for monitoring coverage of vaccines and linked interventions.				
	Monitor the quality and performance of monitoring and surveillance systems for coverage.				
	Collaborate with civil authorities in advocating for increased registration of births and deaths.				
Strategy 19: Provide access to immunization in complex humanitarian emergencies.	Include immunization-related issues in rapid situation assessment of complex emergencies.				
	Incorporate immunization services into emergency preparedness plans and activities.				
	Re-establish immunization services for populations affected by complex emergencies.				
	Include vaccine-preventable diseases in integrated surveillance and monitoring systems established in response to complex emergencies.				

Strategies	Key activities	Activity included in the plan			
Strategic area four : Immunizing in the context of global interdependence		Yes	No	Not applicable	New activity needed
Strategy 20 : Ensure reliable global supply of affordable vaccines of assured quality.	Ensure long-term forecasting for existing and new vaccines by close collaboration between international agencies, donors and vaccine manufacturers.				
Strategy 21 : Ensure adequate and sustainable financing of national immunization systems.	Strengthen national capacity for financial planning within the immunization programme itself and in the Ministry of Health as a whole.				
	Commit greater and sustained national budget allocations for vaccines, on the basis of improved understanding of the value of vaccines in public health.				
	Encourage local and district contributions to health services and immunization programmes by interaction with local businesses and interests.				
	Coordinate immunization financing through the ICCs to ensure adequate and appropriate donor support to national governments.				
Strategy 22 : Improve communication and information dissemination.	Produce high-quality, timely information on the benefits of immunization.				
Strategy 23 : Define and recognize the roles, responsibilities and accountability of partners.	Ensure that immunization remains high on the national health agenda.				
Strategy 24 : Include vaccines in global epidemic preparedness.	Develop country-specific epidemic preparedness and prevention plans relevant to specific diseases.				

The World Health Organization has provided technical support to its Member States in the field of vaccine-preventable diseases since 1975. The office carrying out this function at WHO headquarters is the Department of Immunization, Vaccines and Biologicals (IVB).

IVB's mission is the achievement of a world in which all people at risk are protected against vaccine-preventable diseases. The Department covers a range of activities including research and development, standard-setting, vaccine regulation and quality, vaccine supply and immunization financing, and immunization system strengthening.

These activities are carried out by three technical units: the Initiative for Vaccine Research; the Quality, Safety and Standards team; and the Expanded Programme on Immunization.

The Initiative for Vaccine Research guides, facilitates and provides a vision for worldwide vaccine and immunization technology research and development efforts. It focuses on current and emerging diseases of global public health importance, including pandemic influenza. Its main activities cover: i) research and development of key candidate vaccines; ii) implementation research to promote evidence-based decision-making on the early introduction of new vaccines; and iii) promotion of the development, evaluation and future availability of HIV, tuberculosis and malaria vaccines.

The Quality, Safety and Standards team focuses on supporting the use of vaccines, other biological products and immunization-related equipment that meet current international norms and standards of quality and safety. Activities cover: i) setting norms and standards and establishing reference preparation materials; ii) ensuring the use of quality vaccines and immunization equipment through prequalification activities and strengthening national regulatory authorities; and iii) monitoring, assessing and responding to immunization safety issues of global concern.

The Expanded Programme on Immunization focuses on maximizing access to high quality immunization services, accelerating disease control and linking to other health interventions that can be delivered during immunization contacts. Activities cover: i) immunization systems strengthening, including expansion of immunization services beyond the infant age group; ii) accelerated control of measles and maternal and neonatal tetanus; iii) introduction of new and underutilized vaccines; iv) vaccine supply and immunization financing; and v) disease surveillance and immunization coverage monitoring for tracking global progress.

The Director's Office directs the work of these units through oversight of immunization programme policy, planning, coordination and management. It also mobilizes resources and carries out communication, advocacy and media-related work.

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