



Supporting Independent  
Immunization and Vaccine  
Advisory Committees

# Desk Review of Logistics and Programmatic Decision making

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## 1. Background

The aim of the SIVAC initiative is to assist in the establishment or strengthening of functional, sustainable immunization technical advisory groups - National Immunization Technical Advisory Groups (NITAG) in GAVI-eligible and low middle income countries. One of the Major Activities of the SIVAC program aims to provide information, tools, and training through a technical resource & training center to ITAGs and to the global immunization community, so as to improve evidence-based decision making processes.

The desk review of existing logistics and programmatic decision-making tools aims to draw a descriptive picture of the tools which already exist or which are under development. It will bring useful elements to the “needs assessment” work, and together with this “needs assessment” work, will enable the definition of service specifications that the technical resource and learning centre should provide.

## 2. Objective

The main objective for the Desk Review is to draw a picture of the existing decision-making tools.

This should be reported in three reports (health economics & financing ; logistics and programmatic ; disease burden).

Specific Objectives are:

- To gather information on the tools that already exist and that are under development
- To propose a classification for the decision-making tools
- To identify areas to be addressed in the needs assessments process.

A secondary objective is to develop partnerships for SIVAC and identify experts who will be interested to work with SIVAC on further steps.

## 3. Scope of the review and limitation

The decision-making tools are:

- Guidelines, papers, and templates to conduct analysis
- Specific tools to carry out analysis (models, assessment tools, templates, check lists....)

These tools have been developed by international organizations (such as UNICEF, WHO and GAVI), universities, scientific NGO, Ministries of Health, or others.

The present review does not intent to be exhaustive as accessibility of tools may be limited. Furthermore, decision making tools development is a continuous process and thus, the review should be regularly updated.

## 4. Expected Results

The expected results are:

1. A catalogue of existing tools, with basic information, and, if possible further information. Tools will be listed according to the specific classification (result 2).
  - basic information will include
    - a short summary of what the tool does
    - the author(s) and the institution(s)
    - the year of creation
    - the status of development (developed and tested / developed / under development)
  - if available, further information will include :
    - some information about the context of development
    - how much the tool is accessible (on the internet...) and used (and by whom)
    - intellectual property
    - more technical information
    - feed-back information from users about the tool (ease of use, quality...)
    - contact details of authors
    - any other useful information
2. One (or several) classification(s) to file the tools (this should not be limited to existing tools).
3. An analysis on the findings of the desk review :
  - a summary on the state of the art of existing tools and tools under development
  - a list of potential partners (author and institution) where to tools can be found
  - tools which seem interesting to use within SIVAC (with or without adaptation) and to put on the platform
  - tools which seem to be missing
4. Some specific elements to submit to the “needs assessment” process, based on the analysis (result 3). It can be specific questions or areas which need to be addressed during the needs assessment process (survey with questionnaire + workshop).

One complementary result would be a list of contacts who would be interested to work for SIVAC on specific topics according to requirements (tools development, information collection ...).

## 5. Methodology

The logistics and Programmatic tool review has been conducted on internet and from CD-Rom. The main sources of information are international organizations (WHO, UNICEF, PATH), national and regional immunization advisory committees, consortiums, projects on vaccine preventable diseases and new vaccines introduction. These tools are intended for national policy makers, health personnel at different levels of the health system, technical and financial partners in countries, civil society and the general public.

## 5.1. Definitions

### 5.1.1. Fields and topics

Logistics and Programmatic fields are large and need to be defined. Under the 2 field, topics have been listed as follows :

#### 5.1.1.1. Field «Logistics»: topics

- General EPI logistics : all logistic aspects of EPI
- Supply chain : vaccines, diluents, injection devices and other supplies procurement & delivery, vaccine storage, vaccine management, cold chain management

#### 5.1.1.2. Field «Programmatic»: topics

- Immunization policy and general information on EPI
- National Regulatory Authority
- New and under used vaccines : development status, vaccine specifications and presentation, introduction strategies
- Immunization safety : Health care waste management. AEFI surveillance
- Vaccine preventable disease surveillance
- Communication, advocacy and social mobilization
- Training

### 5.1.2. Type of tools

Logistics and programmatic decision making tools have been categorized into three types :

- Guidelines: documents that provide orientation. Some are users manuals, others are Aide-memoires or reports of consultation meetings or desk reviews.
- Software: Access or Excel developed tools (Calculator and/or data bases). User manuals
- Website: usually a document resource center where a large number of documents and decision making tools can be found on a specific topic.
- Newsletter: topic specific publication sent to a list of beneficiaries on a regular basis

## 5.2. Database

### 5.2.1. Templates

The review outputs have been entered into 2 types of support:

- an MS Excel spreadsheet with the list of all documents selected as logistics and programmatic decision making tools. Information collected for each tool: title, field, subject, key words, summary type of tool, author, year, version status, language, format, source (internet link or CD-Rom). The MS Excel format makes the selection of tools by category easier, using the filter function.
- Individual detailed information for each of the selected tools. In addition to the information given by the database, the summary sheet contains a summary of the tool content.

## 6. Results

**Tab 1: List of logistics and programmatic decision making tools**

Summary reference	Title	Field	Topic	Tool type	Author / institution
1	Procurement of vaccines for public sector programmes A reference manual	logistics	supply chain	guideline	WHO
2	WHO list of vaccines for purchase by UN agencies as of July 2009 (listed by vaccine)	logistics	supply chain	guideline	WHO
3	Adopting global vaccine management policy for national use	logistics	supply chain	guideline	WHO
4	Optimize - Landscape analysis Trends in vaccine availability and novel vaccine delivery technologies: 2008-2025	logistics	supply chain	guideline	WHO PATH
5	Optimize - Landscape analysis Analysis of cold chain technologies	Logistics	supply chain	guideline	WHO PATH
6	Equipment performance specifications and test procedures E1, E3, E4&E11, E5, E6, E7, E10	Logistics	EPI general logistics	guideline	WHO
7	CCEM 1.0 :Cold Chain Equipment Management inventory tool	Logistics	supply chain	software	WHO UNICEF PATH
8	Vaccine presentation assesment tool	logistics	supply chain	software	VPPAG
9	EPI log forecasting tool	logistics	EPI general logistics	software	WHO
10	Preparation of national health-care waste management plans in sub-saharan countries	programmatic	Immunization safety	guideline	Secretariat of the Basel Convention, WHO
11	safe health care waste management : policy paper	programmatic	Immunization safety	guideline	WHO
12	Technet 21	Logistics	EPI general logistics	web site	Technet
13	Strategic advisory group of experts SAGE) - reports	programmatic	Immunization policy, general information on EPI	guideline	WHO
14	Global advisory committee on vaccine safety (GACVS) - reports	programmatic	Immunization safety	guideline	WHO
15	Global immunization vision and strategy 2006-2015 - GIVS	Programmatic	Immunization policy, general information on EPI	guideline	WHO UNICEF
16	WHO position paper on vaccines	Programmatic	Immunization policy, general information on EPI	guideline	WHO
17	WHO-UNICEF guidelines for developing a comprehensive multi year plan (cMYP)	Programmatic	Immunization policy, general information on EPI	guideline	WHO-UNICEF
18	Vaccine introduction guidelines Adding a vaccine to a national immunization programme: decision and implementation	Programmatic	new and under used vaccines	guideline	WHO
19	Introduction of Haemophilus influenzae type b vaccine into immunization programs - management guideline	programmatic	new and under used vaccines	guideline	WHO
20	Detailed Review Paper on Rotavirus Vaccines	programmatic	new and under used vaccines	guideline	Ad-hoc group of experts on rotavirus vaccines

21	Human papillomavirus and HPV vaccines: Technical information for policy makers and health professionals	programmatic	new and under used vaccines	guideline	WHO
22	Strategies, policies and practices for immunization of adolescents	Programmatic	Immunization policy, general information on EPI	guideline	WHO
23	Review of existing documents on planning, performance and assessment of clinical studies on vaccines	programmatic	national regulation authority	guideline	WHO
24	Regulation of vaccines: building on existing drug regulatory authorities	programmatic	national Regulation Authority	guideline	WHO
25	Strengthening national regulation authorities - Aide mémoire	programmatic	national regulation authority	guideline	WHO
26	Vaccine indicator - Assessment tool on existing drug regulatory authority	programmatic	national Regulation Authority	guideline	WHO
27	Developing a national system for dealing with adverse events following immunization	Programmatic	Immunization safety	guideline	WHO
28	How to address events allegedly attributable to vaccination or immunization	Programmatic	Immunization safety	guideline	PAHO
29	Global framework for immunization monitoring and surveillance	Programmatic	vaccination preventable disease surveillance	guideline	WHO-CDC
30	WHO recommended standards for surveillance of selected vaccine preventable diseases	Programmatic	vaccination preventable disease surveillance	guideline	WHO
31	Advocacy - a practical guide: with polio eradication as a case study	programmatic	Communication, advocacy, social mobilisztion	guideline	WHO
32	Immunization in practice. A practical resource guide for Health workers	programmatic	training	guideline	WHO
33	immunological basis for immunization	programmatic	training	guideline	WHO
34	Mid level management course for EPI manager	programmatic	training	guideline	WHO
35	EPIVAC course	programmatic	training	guideline	AMP
36	Advanced Immunization Management (AIM)	programmatic	training	guideline	PATH
37	GIN: Global immunization news	Programmatic	Immunization policy, general information on EPI	newsletter	WHO

The list of the logistics and programmatic decision making tools is in **annex 1** in MS Excel spreadsheet format.

Tools summary sheets are in **annex 2**

## 6.1. Information sources

All major international organizations working in the field of vaccination (according to different themes identified in the previous section) have a website where various tools, information and documents are available and downloadable.

The following is the list of websites visited and used as a source of information:



- **World Health Organization (WHO)**
  - New and under utilized vaccines : <http://www.who.int/nuvi/en/>
  - Immunization, vaccines and Biological (IVB): <http://www.who.int/immunization/en/>
  - IVB document center : <http://www.who.int/immunization/documents/en/>
  - Injection safety : [http://www.who.int/injection\\_safety/en/](http://www.who.int/injection_safety/en/)
  - Health care waste management :  
[http://www.healthcarewaste.org/en/115\\_overview.html](http://www.healthcarewaste.org/en/115_overview.html)
  - WHO position paper :  
<http://www.who.int/immunization/documents/positionpapers/en/index.html>
  - Weekly epidemiologic report : <http://www.who.int/wer/>
  - WHO African Region : <http://www.afro.who.int/ddc/vpd/index.html>
  - WHO Pan American Health Organization:  
<http://www.paho.org/english/ad/fch/im/Provac.htm>
- **PATH**
  - <http://www.path.org/publications/subjects.php#sect5>
- **UNICEF**
  - <http://www.unicef.org/>
  - <http://www.unicef.org/supply/index.html>
- **GAVI**
  - <http://www.gavialliance.org/>
- **Technet 21**
  - <http://www.technet21.org/>
- **Global initiatives fighting against vaccine preventable diseases :**
  - Rotavirus vaccine program - <http://www.rotavirusvaccine.org>
  - PneumoADIP - <http://preventpneumo.org/>
  - Measles Initiative - <http://www.measlesinitiative.org>
  - Malaria Vaccine Initiative - <http://www.malariavaccine.org>
  - Meningitis Vaccine Project - <http://www.meningvax.org/>
  - Polio Eradication - [http://www.polio-vaccine.com/index\\_eng.html](http://www.polio-vaccine.com/index_eng.html)
  - The Hib Initiative - <http://www.hibaction.org/>
  - HPV Vaccine - <http://www.rho.org/vaccination.htm>
- **Immunization technical advisory groups**
  - VPPAG : <http://sites.google.com/site/vppag/Home>

Documents produced by national immunization technical advisory groups on several countries have been consulted. These have not been selected in the desk review and can be communicated upon request. The following NITAGs have been consulted:

- Australia : <http://www.health.gov.au/>

- Canada : <http://www.phac-aspc.gc.ca/>
- USA : <http://www.cdc.gov/>
- Europe : <http://www.euvac.net/>
- France
  - <http://www.infovac.fr/>
  - <http://www.inpes.fr/>
  - <http://www.sante.gouv.fr/>
- United Kingdom
  - <http://www.dh.gov.uk/>
  - <http://www.hpa.org.uk/>
- Switzerland
  - <http://www.bag.admin.ch/>
  - <http://www.infovac.ch/>

## 6.2. Tools selected

A total of 37 logistics and programmatic tools have been selected in the desk review. Among the 37 tools, 10 were classified as logistics tools and 27 as programmatic tools.

**Tab 2: Distribution of tools according to topics**

Field	Number
<b>Logistics</b>	<b>10</b>
EPI general logistics	3
Supply chain	7
<b>Programmatic</b>	<b>27</b>
Immunization policy and general information on EPI	6
National Regulatory Authority	4
Immunization safety	5
New and under utilized vaccines	4
Vaccine preventable disease surveillance	2
Communication, advocacy and social mobilization	1
Training	5

## 6.3. Tools classification

### 6.3.1. Type of tools

84% of the tools in the review are guidelines. The sub categories such as aide-memoire, position paper, user's manual and review of scientific publication fall into this category. 3 types of software used for logistics forecasting and cold chain management were selected. The only website selected contains a mass of tools related to logistics issues (up to date information, study protocols and reports, guidelines, forum...).

### **6.3.2. Version status and year of development**

The majority of the tools are presented in the final version. Some tools (list of vaccines, position paper, training material and newsletter) are regularly updated. The oldest document of the desk review was published in 1993 and the newest in 2009.

### **6.3.3. Audience**

The primary audiences of some tools are health workers and EPI managers at a periphery level (e.g. immunization in practice). Meanwhile, these tools serve as reference for immunization and are of interest to decision makers and EPI managers at a central level.

### **6.3.4. Authors - institution - language**

Tools published by WHO are the more frequent. Some are joint publications (WHO-UNICEF; WHO-PATH).

All tools except 1 (EPIVAC course) are available as an English version. Half of the tools are edited in a French version and some are also edited in Spanish, Arabic or Russian.

## **6.4. Potential partners**

The desk review has permitted us to draft a list of potential partners where tools can be found :

- WHO
- PATH
- UNICEF
- Technet21
- PAHO
- CDC

WHO interferes in all logistics and programmatic subjects. This organization provides the majority of recommendations on EPI. Other identified partners have a more specific role in decision making tool development.

Some partners not listed in the review may also be of interest in the logistics and programmatic decision making tools production:

Riders for Health

Transaid

Bioforce

Universities and technical training institutions on biomechanics, logistics, management for health...

Private companies involved in supply chain

## **6.5. Tools which seem to be missing**

In the field of logistics, the decision making tools missing are:

- A final version of cold chain and logistics inventory software
- A Protocol for the evaluation of the supply chain including transport
- A Model for the development of a relevant supply chain
- A Model for the choice of vaccine presentation and immunization strategy

- An easy to consult list of available vaccines procured by UNICEF with complete and up dated relevant information on presentation, characteristics, availability, price, producers...

In the programmatic field, the decision making tools missing are :

- Documentation on adults vaccination and boosters for adolescents
- Documentation on vaccination of health personnel (vaccines, calendar, operation, monitoring...)
- Documentation on the inter action and link between public immunization systems and private sectors. In most of the cities in the developing world, the private health sector is taking an important and expanding place, providing immunization amongst other health services. The public health sector is not well prepared to collaborate and coordinate.
- Documentation on non EPI vaccination
- Protocol of evaluation and other documentation on efficiency of integrated activities in preventive medicine (integrated campaign, mother and child health weeks...)
- Evaluation and documentation on immunization services organization/vaccine wastage/immunization coverage

#### **6.6. Elements to submit to the “needs assessment” process**

The needs assessment process for ITAG’s technical resource and training center consists of a questionnaire and a workshop. In the logistics and programmatic fields, some specific areas which need to be addressed are :

- perception of logistics constraints in EPI (especially in the context of new vaccines introduction)
- integration of EPI activities (and particularly logistics related) with other health intervention,
- link with the communities and others relevant decision makers to increase immunization success
- link with the private sector for immunization services (health sector for immunization delivery; general sector for logistics and others services)
- appropriate language for decision making tools and other documentations

## ANNEX 1

Desk review of logistics and programmatic decision making tools (Excel spreadsheet)

## ANNEX 2

### Summary sheets of logistics and programmatic decision making tools

Summary sheet	1
Title	<b>PROCUREMENT OF VACCINES FOR PUBLIC SECTOR PROGRAMMES A REFERENCE MANUAL</b>
Summary	<p>Vaccine marketplace issues and vaccine safety and quality issues show that effective procurement requires specialized knowledge and a careful approach. Vaccines should always be purchased by a competent procurement entity following established procedures. Ideally, countries should be able to buy safe, effective vaccines at reasonable prices; if not, they should have a plan in place to upgrade their staff skills. In the absence of vaccine procurement expertise, a country may need to use a purchasing agent.</p> <p>The authors have attempted to deliver, in one comprehensive document, a step-by-step model for vaccine procurement, critical background information and basic reference material of importance to procurement personnel in developing and transitional country programmes.</p>
Field	Logistics
Topics	Supply chain
Key words	Vaccine procurement, vaccine quality, national regulation authority, bidding process
Type of tool	Guideline
audience	Central
Author	WHO
Year	2003
Version status	Final version
Language	English
Format of document	Electronic downloadable document - .pdf
Nb of pages	1209
Internet link	<a href="http://www.who.int/vaccines-documents/DocsPDF06/pmfull.pdf">http://www.who.int/vaccines-documents/DocsPDF06/pmfull.pdf</a>

**Summary sheet**

**2**

Title	<b>WHO LIST OF VACCINES FOR PURCHASE BY UN AGENCIES AS OF JULY 2009</b>
Summary	This web page give the name of producers of vaccines procured trough the UN agencies and a link to the vaccine producer web site, enable NRA to find information on vaccines commonly used in developing countries.
Field	logistics
Topics	Supply chain
Key words	UN procured vaccines, producers, national regulation authorities, programming, new vaccines
Type of tool	guideline
audience	Central
Author	WHO
Year	2009
Version status	Regularly updated
Language	English
Format of document	On line - .html
Nb of pages	
Internet link	<a href="http://www.who.int/immunization_standards/vaccine_quality/pq_vaccines/en/index.html">http://www.who.int/immunization_standards/vaccine_quality/pq_vaccines/en/index.html</a>

**Summary sheet**

**3**

Title	<b>ADOPTING GLOBAL VACCINE MANAGEMENT POLICIES FOR NATIONAL USE</b>
Summary	<p>In recent years, WHO, UNICEF and UNFPA have issued new global policies for improving the administration of safe and effective vaccines. Unfortunately, national programmes are not always implementing these policies. Consequently, the benefits are not being realized and resources are being wasted. This document aims to help programmes develop national policies and procedures related to vaccines management. It is especially intended for EPI managers and national logisticians who will start this process by :</p> <ul style="list-style-type: none"> <li>- writing national policies for immunization services;</li> <li>- writing procedures for their implementation</li> <li>- preparing implementation and implementation plan.</li> </ul>
Field	Logistics
Topics	Supply chain
Key words	Immunization policy, vaccine vial monitor, multi dose open vial, anti disable syringes.
Type of tool	Guideline
audience	central
Author	WHO
Year	2002
Version status	final version
Language	English
Format of document	Electronic downloadable document
Nb of pages	72
Internet link	<a href="http://www.who.int/vaccines-documents/DocsPDF02/www713.pdf">http://www.who.int/vaccines-documents/DocsPDF02/www713.pdf</a>

Title	<p><b>OPTIMIZE - LANDSCAPE ANALYSIS TRENDS IN VACCINE AVAILABILITY AND NOVEL VACCINE DELIVERY TECHNOLOGIES: 2008-2025</b></p> <p>This landscape analysis has been undertaken to identify trends in the availability of vaccines and novel vaccine delivery technologies that are and will be of relevance to low- and middle-income countries (LMICs) between now and 2025. This document provides valuable information on major trends for the vaccine supply chain.</p> <p>The key findings are:</p> <ul style="list-style-type: none"> <li>• The number of vaccines potentially available for use in LMICs will increase during the period 2008–2025.</li> <li>• Vaccine manufacturers are conservative, and the majority of existing and new vaccines will continue to be delivered by needle and syringe unless incentives and/or data are generated to support alternative delivery methods.</li> <li>• A wide range of novel vaccine technologies, many of which are needle-free and/or employ alternative immunization routes, are being developed.</li> </ul>
Summary	<p>Overall, the goals of these technologies are to:</p> <ul style="list-style-type: none"> <li>• Reduce needle and syringe use.</li> <li>• Reduce the dose of vaccine required and/or reduce wastage.</li> <li>• Deliver the vaccine by a route that will stimulate an appropriate immune response.</li> </ul> <p>Some of the approaches will require significant effort to be spent developing appropriate vaccine formulations that are compatible with the delivery technology, in addition to developing the device/technology itself. Consequently, these approaches will not be available until the medium to long term (after 2015).</p> <ul style="list-style-type: none"> <li>• Short-term activities are possible based on increasing use of existing technologies that would improve vaccination safety, such as increasing use of syringes with auto-disable and anti-stick mechanisms.</li> <li>• Suitable combinations of delivery technology and “available” vaccine need to be identified for use in “demonstration” projects to evaluate new delivery technologies.</li> <li>• Ultimately, introduction of novel vaccine delivery technologies will require their incorporation early in the development path of novel vaccines.</li> </ul>
Field	Logistics
Topics	Supply chain
Key words	Immunization strategies, vaccine delivery technology, vaccine availability, vaccine presentation and formulation, planning
Type of tool	Guideline
audience	Central
Author	PATH – OMS
Year	2000
Version status	Final version
Language	English
Format of document	Electronic downloadable document - .pdf
Nb of pages	135
Internet link	<a href="http://www.path.org/files/TS_opt_trends_vac_avail.pdf">http://www.path.org/files/TS_opt_trends_vac_avail.pdf</a>



Title

**OPTIMIZE - LANDSCAPE ANALYSIS  
ANALYSIS OF COLD CHAIN TECHNOLOGIES**

Summary

The goal of this landscape analysis is to inform the Optimize project on the current availability of cool chain technologies, the expected availability within five years, and the projected availability by 2025.

Specific objectives of the activity are:

- To anticipate the characteristics of cool chain equipment that will be needed in 2012 and 2025 and to assess, in broad terms, the need for modified or new performance specifications.
- To forecast the availability of cool chain products that are likely to meet PQS requirements at or soon after the WHO deadlines for submission of dossiers by category and by climatic zone.<sup>1</sup>
- To seek equipment not yet PQS-qualified that appears to potentially meet the needs of the cool chain.
- To assess evidence of the comparative whole-life cost and performance of different models of equipment to identify “best-buys” in relation to current and future needs.<sup>2</sup>
- To review, in broad terms, the strengths and weaknesses of the current PQS performance specifications by category and anticipate probable demands for cool chain equipment in the future.

These landscaping activities are being used to develop a plan of action for the Optimize project in conjunction with other WHO and PATH initiatives to prepare for a successful future of distributing and managing vaccines.

The document provides an overview of the challenge facing by the country with the introduction of new vaccines and new cold chain technologies.

Field Logistics

Topics Cold Chain

Key words Cold chain capacity, new vaccines, new technologies, equipment specifications, planning

Type of tool Report

audience Central

Author WHO - PATH

Year 2008

Version status Final version

Language English

Format of document Electronic downloadable document - .pdf

Nb of pages 21

Internet link [http://www.path.org/files/TS\\_opt\\_la\\_cool\\_chain.pdf](http://www.path.org/files/TS_opt_la_cool_chain.pdf)

Summary sheet

6

Title	<b>EQUIPMENT PERFORMANCE SPECIFICATIONS AND TEST PROCEDURES E1, E3, E4&amp;E11, E5, E6, E7, E10</b>
Summary	This joint WHO and UNICEF publication is the principal source of information and advice for those responsible for purchasing equipment for use in immunization programmes around the world. All examples of a selected product must have performance characteristics that meet the relevant specification standards; quality and reliability characteristics that are appropriate for field conditions, and cradle-to-grave safety characteristics that ensure that no harm is caused to users, patients, or to the environment over the course of the product's life cycle.
Field	Logistique
Topics	EPI general logistics
Key words	Prequalified EPI equipment, technical specification, procurement, cold chain, waste management, transport
Type of tool	Guideline
audience	Central
Author	OMS
Année	2006
Version status	Regularly updated
Language	English
Format of document	Web site - Electronic downloadable document - .pdf
Nb de pages	Web site
Lien internet/Support	<a href="http://www.who.int/immunization_standards/vaccine_quality/pqs/en/">http://www.who.int/immunization_standards/vaccine_quality/pqs/en/</a>

Summary sheet

7

Title **CCEM 1.0 :COLD CHAIN EQUIPMENT MANAGEMENT TOOL**

Summary

A comprehensive and regularly updated cold chain equipment inventory is necessary to insure a good cold chain management. It is especially necessary for countries intending to introduce new vaccine, to assess the capacity of the cold chain to safely store vaccines at all level. A cold chain replacement plan should be based on a good knowledge on existing cold chain equipment and in relation with the multi year plan.

The Cold Chain Equipment Manager (CCEM) is an open-source, Microsoft Access-based software tool. CCEM is accompanied by a user manual, data collection questionnaires, a surveyor's guide to these questionnaires, and an equipment identification guide. CCEM also comes with practice files, providing new users with practice data to demonstrate how CCEM will analyze cold chain equipment data and facilitate multiyear equipment planning.

Field Logistics

Topics Supply Chain

Key words Inventory, cold chain, monitoring, planning, CCEM, new vaccines

Type of tool Software + user's guide

audience Central

Author OMS – UNICEF – PATH

Année 2008

Version status Under développment

Language English

Format of document En ligne - .html

Nb of pages User's guide : 113

Internet link <http://www.path.org/publications/details.php?i=1569>  
[http://www.path.org/files/TS\\_ccem\\_tool\\_fs.pdf](http://www.path.org/files/TS_ccem_tool_fs.pdf) (descriptif)

Title	<b>VACCINE PRESENTATION ASSESSMENT TOOL</b>
Summary	<p>The Vaccine Presentation Assessment Tool (VPAT) was developed by Andrew Garnett through a project of the PATH Malaria Vaccine Initiative (MVI), with financial support from the Bill &amp; Melinda Gates Foundation.</p> <p>The VPAT was originally designed for malaria vaccines; it was subsequently extended for use with other new vaccines, with financial support from the GAVI Alliance.</p> <p>The vaccine presentation assessment tool (VPAT) is designed to model the logistical and financial impact of adding a new vaccine to an immunization schedule. The output from the tool will provide an analytical basis to support collaborative evidence-based discussions on these impacts, internally within the public sector, and externally with vaccine manufacturers and with target countries.</p> <p>The tool is composed of :</p> <ul style="list-style-type: none"> <li>- The VPAT user guide</li> <li>- The VPAT tool itself</li> <li>- An example of the VPAT in use</li> <li>- The final Product Presentation Report for the RTS,S Malaria vaccine, developed using the VPAT</li> </ul>
Field	Logistics
Topics	Supply chain
Key words	New vaccines, cold chain, logistics and economic impact,
Type of tool	Software (Excel) + user's manual
audience	Central
Author	VPPAG
Year	2009
Version status	Final version
Language	English
Format of document	Electronic downloadable document - .pdf
Nb of pages	
Internet link	<a href="http://sites.google.com/site/vppagp/vpat">http://sites.google.com/site/vppagp/vpat</a>

**Summary sheet**

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Title	<b>EPI LOGISTIC FORECASTING</b>
Summary	EPI Logistic Forecasting is a MS Excel management tool developed by WHO AFRO. It provides forecast of cold chain equipment, supply chain, vaccines and supplies needs for subsequent years. It is based on immunization program plan and strategies and can be used for simulation of vaccine introduction strategy, supply chain strategy, cold chain replacement ...
Field	Logistics
Topics	EPI General logistics
Key words	Multi year EPI logistics forecast, new vaccines, planning, supply chain, Excel tool.
Type of tool	MS Excel tool + user's guide
audience	Central
Author	WHO
Year	2009
Version status	Regularly updated
Language	English/french
Format of document	MS Excel - .xls
Nb of pages	
Internet link	MS Excel

Title

## PREPARATION OF NATIONAL HEALTH-CARE WASTE MANAGEMENT PLANS IN SUB-SAHARAN COUNTRIES

### GUIDANCE MANUAL

The manual is the result of experience gathered over several years (2000-2004) in conducting technical assistance projects in a number of countries in the Sub-Saharan region. It aims at identifying appropriate practices for health care waste management by providing assessment and planning tools applicable in most sub-Saharan countries of Africa. The document is divided into four sections.

The first section contains fundamental information people involved in health care waste management at any level should be aware of; definitions, characterisation and classification of health care waste, associated risks and basic protective measures for employees, minimum observance that any health care facilities should comply

Summary

The second section presents the actions that should be taken as a first step to assess the current situation before developing a national health care waste management plan.

The third section provides guidance for the establishment of a national health care waste management plan. It describes how to develop plans according to specific objectives to be used by the planning officers of the central, regional and municipal Governments to improve all aspects of health care waste management.

Finally the fourth section provides guidance to develop a strategy to implement a health care waste management plan at national and regional levels.

Field Programmatic

Topics Immunization safety

Key words Health care waste management, national policy, planning.

Type of tool Guideline

audience Central

Author Secretariat of the Basel Convention , WHO

Year 2004

Version status Final version

Language English

Format of document Downloadable document pdf

Nb of pages 87

Internet link [http://www.who.int/water\\_sanitation\\_health/medicalwaste/en/guidancemanual.pdf](http://www.who.int/water_sanitation_health/medicalwaste/en/guidancemanual.pdf)

Title	<b>SAFE HEALTH-CARE WASTE MANAGEMENT</b>
	<b>POLICY PAPER</b>
Summary	This WHO policy paper emphasizes the consequences of unsafe health care waste management and the risk presented to health. It provides guiding policies principles and indicates short term, medium term and long term strategies to safely manage health care waste at country level.
Field	Programmatic
Topics	Immunization safety
Key words	Health care waste management, national policy, planning.
Type of tool	Guideline
audience	Central
Author	WHO
Year	
Version status	Final version
Language	English
Format of document	Downloadable document pdf
Nb of pages	2
Internet link	<a href="http://www.who.int/water_sanitation_health/medicalwaste/en/hcwmpolicye.pdf">http://www.who.int/water_sanitation_health/medicalwaste/en/hcwmpolicye.pdf</a>

Title	<b>TECHNET 21</b>
Summary	<p>This mailing list and forum was initiated in 1998 by <a href="#">WHO</a> to disseminate information regarding immunization services delivery, logistics, innovation and research and to fuel discussion.</p> <p>Today it is an interactive medium for immunization experts, researchers, academicians, equipment manufacturers and many others. Topics in the area of vaccine cold chain address equipment maintenance and rehabilitation, including disposal of Chloro-Flouro-Carbon or CFC refrigeration equipment. logistics, covering transportation, storage and distribution; pricing; budgets; PQS/PIS (WHO Performance Quality and Safety parameters and Production Information Sheets) manufacturers vaccine forecasting and volume calculators; data loggers, thermometers/temperature monitoring tools/methods like Vaccine Vial Monitors (VVM), calculators; vaccine freezing; temperature monitoring tools/methods like data loggers, thermometers, Vaccine Vial Monitors (VVM), freeze tags, shake test, Cold Chain Monitor (CCM) cards; Effective Vaccine Store Management (EVSM); MIS (vaccine and equipment stock management software); vaccine freezing; and market assessment.</p> <p>Immunization waste and injection safety are also popular topics and span medical waste/ health-care waste management , technologies (needle/hub cutters, safety boxes, incinerators), and overall economics of disposal. The forum is also an excellent source to learn at first hand about the latest developments in vaccines and the Expanded Programme on Immunization.</p>
Field	<a href="#">Logistics</a>
Topics	<a href="#">EPI General logistics</a>
Key words	<a href="#">Cold chain, supply chain, immunization safety, waste management, forum, conference, document center.</a>
Type of tool	<a href="#">web site</a>
audience	<a href="#">central ; mid level, peripheric</a>
Author	<a href="#">Technet 21</a>
Year	<a href="#">1998</a>
Version status	<a href="#">Regularly updated</a>
Language	<a href="#">English</a>
Format of document	<a href="#">On line - .html</a>
Nb of pages	<a href="#">NA</a>
Internet link	<a href="http://www.technet21.org">http://www.technet21.org</a>



Title	<b>STRATEGIC ADVISORY GROUP OF EXPERT REPORTS</b>
Summary	<p>SAGE serves as the principal advisory group to the World Health Organization (WHO) for development of policy related to vaccines and immunization. SAGE is charged with advising WHO on overall global policies and strategies, ranging from vaccine and technology research and development, to delivery of immunization and linkages between immunization and other health interventions. The mandate of SAGE is to provide strategic advice rather than technical input, and is not restricted to childhood vaccines and immunization but extends to the control of all vaccine-preventable diseases.</p> <p>SAGE advises the WHO Director-General specifically on the:</p> <ol style="list-style-type: none"> <li>1. adequacy of progress towards the achievement of the goals of the Global Immunization Vision and Strategy (GIVS);</li> <li>2. major issues and challenges to be addressed with respect to achieving the goals of GIVS;</li> <li>3. immunization programme response to current public health priorities;</li> <li>4. major general policies, goals and targets including those related to vaccine research and development;</li> <li>5. adequacy of WHO's strategic plan and priority activities to achieve the GIVS goals consistent with its mandate and considering the comparative advantages and the respective roles of partner organizations;</li> <li>6. cross-departmental activities and initiatives related to vaccine and immunization technologies and strategies and linkages with other health interventions;</li> <li>7. engagement of WHO in partnerships that will enhance achievement of global immunization goals.</li> </ol> <p>SAGE meets twice a year and produces meeting reports edited in the WHO weekly epidemiologic report</p>
Field	Programmatic
Topics	Immunization policy, general information on EPI
Key words	GIVS, immunization policies, vaccine and technology research, immunization delivery
Type of tool	Report
audience	Central
Author	WHO
Year	2009
Version status	Regularly updated
Language	English, French, Chinese, Russian
Format of document	Downloadable document pdf
Nb of pages	NA
Internet link	<a href="http://www.who.int/immunization/sage_conclusions/en/index.html">http://www.who.int/immunization/sage_conclusions/en/index.html</a>



Title GLOBAL ADVISORY COMMITTEE ON VACCINE SAFETY (GACVS)

No vaccine is however completely safe or provides 100% protection in all vaccinated individuals. Differences in the way individual immune systems react to a vaccine account for rare occasions when people are not protected following immunization or experience side-effects.

Although the vast majority of adverse events reported after vaccination are mild, some have been more serious. Some are due to the vaccine itself and constitute actual "vaccine reactions" such as those at the site of injection and some are linked to actual mistakes in vaccine preparation or administration error. Many events are, however, coincidental medical conditions. The reporting of such coincidental conditions can lead to undue fears and allegations.

Summary

Significant efforts have been made by regulatory authorities and manufacturers to further improve and ensure the safety of vaccines. Despite this, technology advances and increasing knowledge about vaccines have led to investigations focused on the safety of existing vaccines which have had an increasingly important effect on public confidence in immunization.

It is essential that concerns regarding vaccine-related adverse events are rapidly and effectively dealt with in order to maintain confidence in a vaccine, and ultimately maintain immunization coverage and reduce disease incidence. However, vaccine-associated adverse events can affect healthy individuals and should be promptly identified to allow additional research and appropriate action to take place.

It was in this context that WHO's Department of Vaccines and Biologicals, under the auspices of the Immunization Safety Priority Project, established, in 1999, the Global Advisory Committee on Vaccine Safety.

GACVS meets twice a year and produces reports on immunization safety issues, published in the WHO Weekly Epidemiologic Report.

Field Programmatic

Topics Immunization safety

Key words AEFI, pharmacovigilance, national regulation authorities, vaccines safety, reports

Type of tool Guideline

audience Central

Author WHO

Année 2009

Version status Regularly updated

Language English, french

Format of document Electronic downloadable document

Nb of pages NA



Internet link

[http://www.who.int/vaccine\\_safety/en/](http://www.who.int/vaccine_safety/en/)

Summary sheet

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Title GLOBAL IMMUNIZATION VISION AND STRATEGY 2006-2015 (GIVS)

In response to challenges in global immunization, WHO and UNICEF developed the Global Immunization Vision and Strategy (GIVS). In brief, GIVS aims to assist countries to immunize more people, from infants to seniors, with a greater range of vaccines. GIVS is the first ever global ten-year framework to fight vaccine-preventable diseases through immunization. It covers the period 2006 to 2015.

GIVS has four main aims :

- to immunize more people against more diseases;
- to introduce a range of newly available vaccines and technologies;
- to integrate other critical health intervention with immunization;
- to manage vaccination programmes within the context of global interdependence.

GIVS contain a number of ambitious immunization goals. In addition, it provides over two dozen strategies from which countries can choose for implementation according to their specific needs.

Field Programmatic

Topics Immunization policy, general information on EPI

Key words New vaccines, immunization strategy, district based immunization system, vaccine quality, sustainability

Type of tool guideline

audience Central

Author WHO-UNICEF

Année 2005

Version status Final version

Language English, french

Format of document Electronic downloadable document - .pdf format

Nb of pages 84

Internet link [http://www.who.int/immunization/givs/related\\_docs/en/index.html](http://www.who.int/immunization/givs/related_docs/en/index.html)

Title	<b>WHO POSITION PAPER ON VACCINES</b>
Summary	<p>In accordance with its mandate to provide guidance to Member States on health-policy matters, WHO is issuing a series of regularly updated position papers on vaccines and combinations of vaccines against diseases that have an international public health impact. These papers are concerned primarily with the use of vaccines in large-scale immunization programmes; they summarize essential background information on diseases and vaccines, and conclude with the current WHO position concerning their use in the global context. (all vaccines used in EPI and new vaccines to be introduced in developing word are concerned)</p> <p>The papers have been reviewed by a number of experts within and outside WHO, and since 2006 they have been reviewed and endorsed by WHO's Strategic Advisory Group of Experts (SAGE) on Immunization.</p> <p>The position papers are designed for use mainly by national public health officials and managers of immunization programmes. However, they may also be of interest to international funding agencies, the vaccine manufacturing industry, the medical community, the scientific media and the public.</p> <p>WHO position paper are classified by vaccine preventable disease. They are available on the WHO wed site and are published in the WHO weekly Epidemiologic report.</p>
Field	Programmatic
Topics	Immunization policy, general information on EPI
Key words	New vaccines, immunization strategy, immunization schedule, vaccine safety,
Type of tool	Position paper
audience	Central
Author	WHO
Année	2009
Version status	Regularly updated
Language	English, french
Format of document	Electronic downloadable document - .pdf format
Nb of pages	NA
Internet link	<a href="http://www.who.int/immunization/documents/positionpapers/en/index.html">http://www.who.int/immunization/documents/positionpapers/en/index.html</a>

**Summary sheet**

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Title	<b>WHO-UNICEF GUIDELINES FOR DEVELOPPING A COMPREHENSIVE MILTI YEAR PLAN (cMYP)</b>
Summary	<p>Multi-year planning is a key management tool for national immunization programmes, and in recent years managers have been asked to develop many different plans to reach many different immunization objectives. Developing a comprehensive multiyear plan (cMYP) presents an opportunity to consolidate existing plans into a single document that addresses global, national and sub-national immunization objectives and strategies, and that also evaluates the costs and financing of that plan. The cMYP uses the Global Immunization Vision and Strategies (GIVS) as a reference to help managers plan for their immunization programme. The cMYP guideline is a global document that gives a flexible strategy for planning, and is designed to fit within national planning processes and health sector planning.</p> <p>This guide, developed by WHO and UNICEF, presents a series of steps to develop a cMYP. As managers review and assess the results of each step in the process, they should ensure that the plan meets national policy, priorities, and available resources. It is highly recommended that an iterative process be undertaken so that alternative strategies are costed and reviewed before a national plan is finalized.</p>
Field	Programmatic
Topics	Immunization policy, general information on EPI
Key words	Multi Year plan, immunization strategy, GIVS, planning, immunization policy, immunization cost and financing
Type of tool	guideline
audience	Central
Author	WHO-UNICEF
Année	2006
Version status	Final version
Language	English, french
Format of document	Electronic downloadable document - .pdf format
Nb of pages	69
Internet link	<a href="http://whqlibdoc.who.int/hq/2005/WHO_IVB_05.20_eng.pdf">http://whqlibdoc.who.int/hq/2005/WHO_IVB_05.20_eng.pdf</a>

Title	<p><b>VACCINE INTRODUCTION GUIDELINES</b></p> <p><b>ADDING A VACCINE TO A NATIONAL IMMUNIZATION PROGRAMME: DECISION AND IMPLEMENTATION</b></p>
Summary	<p>New vaccines present numerous issues in prioritizing investments of a national immunization programme. The challenge remains to tackle those issues systematically, providing the best available services in a cost-effective way. This guide provides national programme managers and decision-makers with a systematic approach to decision-making when facing the opportunities and challenges presented by adding a new vaccine product into national immunization programmes. For countries that make the decision to introduce a vaccine, the guide also examines the key elements for programmatic planning and for monitoring the impact of the additional vaccine.</p> <p>This document aims to help:</p> <ul style="list-style-type: none"> <li>• country decision-makers to decide whether to add a new vaccine to the national immunization programme (NIP);</li> <li>• NIP managers to implement the operational steps to add the vaccine.</li> </ul> <p>Covering policy and programmatic aspects together, the document is addressed towards both audiences, trying to provide guidance for a technically correct decision and implementation. It proposes a generic process to assess the available vaccines for introduction, followed by the common operational steps to introduce the vaccine(s). However, each vaccine presents its own specific issues, which are addressed in Annex 1 of the document.</p>
Field	Programmatic
Topics	New and under utilized vaccines
Key words	New vaccines, GIVS, multi year plan, planning, immunization strategy, vaccine quality and safety
Type of tool	guideline
audience	Central
Author	WHO
Année	2005
Version status	Final version
Language	English, french
Format of document	Electronic downloadable document - .pdf format
Nb of pages	60
Internet link	<a href="http://whqlibdoc.who.int/hq/2005/WHO_IVB_05.18.pdf">http://whqlibdoc.who.int/hq/2005/WHO_IVB_05.18.pdf</a>



Summary sheet

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Title	<b>Introduction of Haemophilus influenzae type b vaccine into immunization programmes - management guideline</b>
Summary	WHO recommends that Hib vaccine now be included in routine infant immunization programmes for all children, as appropriate to national capacities and priorities. This manual provides managers with the information they need to implement a national decision to introduce Hib vaccine. It contains recommendation and information tools for health workers and parents.
Field	Programmatic
Topics	Nex and under used vaccines
Key words	epidemiology of Hib, Hib vaccine, recommandations, information tool, vaccine introduction
Type of tool	guideline
audience	Central, mid level
Author	WHO
Année	2000
Version status	Final version
Language	English-french-spanish-russian
Format of document	Electronic downloadable document - .pdf format
Nb of pages	32
Internet link	<a href="http://whqlibdoc.who.int/hq/2000/WHO_V&amp;B_00.05.pdf">http://whqlibdoc.who.int/hq/2000/WHO_V&amp;B_00.05.pdf</a>

**Summary sheet**

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<b>Title</b>	<b>Detailed Review Paper on Rotavirus Vaccines</b>
<b>Summary</b>	This Detailed Review Paper on Rotavirus Vaccines prepared by an ad-hoc group of experts on rotavirus vaccines was presented to the WHO Strategic Advisory Group of Experts (SAGE) on Immunization in April 2009. It provides up to date critical information on rotavirus epidemiology, rotavirus vaccines characteristics, recommendations for rotavirus vaccine introduction in EPI and surveillance of rotavirus diseases.
<b>Field</b>	Programmatic
<b>Topics</b>	Nex and under used vaccines
<b>Key words</b>	epidemiology rotavirus, rotavirus vaccine, new vaccine introduction
<b>Type of tool</b>	guideline
<b>audience</b>	Central
<b>Author</b>	WHO
<b>Année</b>	2009
<b>Version status</b>	Final version
<b>Language</b>	English
<b>Format of document</b>	Electronic downloadable document - .pdf format
<b>Nb of pages</b>	57
<b>Internet link</b>	<a href="http://www.who.int/nuvi/rotavirus/3_Detailed_Review_Paper_RotavirusVaccines_18_March_2009.pdf">http://www.who.int/nuvi/rotavirus/3_Detailed_Review_Paper_RotavirusVaccines_18_March_2009.pdf</a>

Title

**Human papillomavirus and HPV vaccines: Technical information for policy makers and health professionals**

Summary

In 2006, a vaccine that protects against infection with four HPV genotypes was licensed; a second vaccine that protects against two HPV genotypes is likely to be licensed soon. Countries need to consider whether and how to use these new vaccines. The decision to introduce a new vaccine depends on factors such as:

- public health priority (based on, for example, the burden of disease);
- the effectiveness and safety of vaccines;
- the availability of other interventions;
- the costs and cost-effectiveness of vaccines;
- programme strength and ability to deliver vaccines.

This document aims to provide policy-makers and health professionals with key information on HPV, HPV-related diseases and HPV vaccines, and to underpin the guidance note recently published by WHO and UNFPA.<sup>7</sup> Information on implementation of cervical cancer screening programmes is available in a related document;<sup>8</sup> while not covered here, such programmes should be considered an important part of comprehensive cervical cancer control

Field

Programmatic

Topics

New and under used vaccines

Key words

epidemiology of HPV, HPV vaccines specifications, HPV vaccines administration, HPV disease surveillance, new vaccine introduction

Type of tool

guideline

Audience

Central,

Author

WHO

Année

2007

Version status

Final version

Language

English

Format of document

Electronic downloadable document - .pdf format

Nb of pages

43

Internet link

[http://whqlibdoc.who.int/hq/2007/WHO\\_IVB\\_07.05\\_eng.pdf](http://whqlibdoc.who.int/hq/2007/WHO_IVB_07.05_eng.pdf)

**Summary sheet**

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Title	<b>Global strategies, policies and practices for immunization of adolescents</b>
Summary	Adolescence has been an age group not focused on before by the Department of Vaccines and Biologicals. Now, with the collaboration of the WHO Child and Adolescent Unit, a comprehensive review has been undertaken regarding the issues of immunizing the adolescent. The status of adolescent immunization in the WHO regions is also documented.
Field	Programmatic
Topics	Immunization policy, general information on EPI
Key words	Immunization on adolescent, review, immunization policy, immunization schedule
Type of tool	Guideline
audience	Central
Author	WHO
Année	1999
Version status	Final version
Language	English/french/spanish
Format of document	Electronic downloadable document - .pdf format
Nb of pages	35
Internet link	<a href="http://whqlibdoc.who.int/hq/1999/WHO_V&amp;B_99.24.pdf">http://whqlibdoc.who.int/hq/1999/WHO_V&amp;B_99.24.pdf</a>

Summary sheet

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Title	<b>Review of existing documents on planning, performance and assessment of clinical studies on vaccines</b>
Summary	This document reviews the major guidelines currently available on clinical trials on vaccines. It concludes that there are several essential features of clinical trials on vaccines that are not sufficiently covered in existing documents, because they do not give sufficient consideration to the distinct features of vaccines. It contains a review of most of the relevant guidelines in existence and provides a blueprint for the gaps still existing. It is intended as a reference document for national authorities involved in performance or evaluation of clinical trials on vaccines. It contains a number of annexes that reference key documents, including those of the EMEA and the FDA.
Field	Programmatic
Topics	National regulation authorities
Key words	Vaccine clinical trial, guidelines, evaluation, EMEA, FDA
Type of tool	Guideline
audience	Central
Author	WHO
Année	1999
Version status	Final version
Language	English/french/spanish
Format of document	Electronic downloadable document - .pdf format
Nb of pages	35
Internet link	<a href="http://whqlibdoc.who.int/hq/1999/WHO_V&amp;B_99.09.pdf">http://whqlibdoc.who.int/hq/1999/WHO_V&amp;B_99.09.pdf</a>

Title	<b>Regulation of vaccines: building on existing drug regulatory authorities</b>
Summary	<p>This document was produced to guide national authorities involved in vaccine regulation how to develop the capacity to effectively regulate vaccines. It is based on publications of the Expert Committees on Biological Standardization, on Specifications for Pharmaceutical Preparations, and on the Use of Essential Drugs.</p> <p>The indicators contained in the document to help countries assess the performance of their vaccine regulatory system were developed with input from 38 countries by an informal consultation of experts. The major topics include an overview of drug regulatory authority functions, the essential features of a regulatory system for vaccines, and a stepwise plan for proceeding to develop such a system. It includes annexes on such topics as how to contract for laboratory support, how to get started, and indicators for essential regulatory functions for both drugs and vaccines.</p>
Field	Programmatic
Topics	National regulatory authorities
Key words	National regulatory authorities, vaccine regulation
Type of tool	guideline
audience	Central
Author	WHO
Année	1999
Version status	Final version
Language	English/french/spanish
Format of document	Electronic downloadable document - .pdf format
Nb of pages	34
Internet link	<a href="http://whqlibdoc.who.int/hq/1999/WHO_V&amp;B_99.10.pdf">http://whqlibdoc.who.int/hq/1999/WHO_V&amp;B_99.10.pdf</a>

Summary sheet

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Title	<b>STRENGTHENING NATIONAL REGULATORY AUTHORITIES AIDE MEMOIRE</b>
Summary	<p>To achieve effective regulation, national regulatory authorities need to identify areas of weakness, define priorities, plan and implement corrective measures. This Aide memoire provides information on NRA critical functions; indicators to assess NRAs and direction for NRA strengthening. The strategies for NRA strengthening are developed in 4 components :</p> <ul style="list-style-type: none"> <li>• National commitment</li> <li>• Organisational structure,</li> <li>• Human resources,</li> <li>• Sustainable financing.</li> </ul>
Field	Programmatic
Topics	National regulation authority
Key words	National regulation authority, assessment, strengthening strategies
Type of tool	Guideline – aide mémoire
audience	Central
Author	WHO
Year	
Version status	Final version
Language	English
Format of document	Downloadable document
Nb of pages	2
Internet link	<a href="http://whqlibdoc.who.int/hq/2003/a80815.pdf">http://whqlibdoc.who.int/hq/2003/a80815.pdf</a>

Title	<b>VACCINE INDICATOR – ASSESSMENT TOOL FOR DRUG REGULATORY AUTHORITIES</b>
Summary	In 1997, WHO launched an initiative to strengthen National Regulatory Authorities in order to ensure that 100% of all vaccines used by national immunization programmes meet standards of quality, safety and efficacy. Three main sources of vaccines were identified (1) countries sourcing their vaccines through UN agencies, (2) countries with direct procurement and (3) producing countries. An assessment tool using indicators building on existing drug regulatory authorities has been developed to serve as a benchmark and to monitor progress for all countries. This benchmark is also used for prequalifying products that will be purchased by UN agencies. Since 1997, more than 76 countries have provided input to the development of the assessment tool. Revisions were made in 1999, 2001, 2002 and 2004. This revision of vaccine indicators indicates those critical indicators that are essential for NRA capacity and prequalification. The current assessment tool is based on commonalities that were identified in the areas of drugs, vaccines and medical devices. Vaccine indicators (revised June 2004) are available in English, French, Spanish and Arabic.
Field	Programmatic
Topics	National regulation authority
Key words	National regulation authority, assessment, vaccine indicators, vaccine regulation
Type of tool	guideline
audience	Central
Author	WHO
Year	2004
Version status	Updated version
Language	English, french, spanish, arabic
Format of document	Downloadable document
Nb of pages	
Internet link	<a href="http://www.who.int/immunization_standards/national_regulatory_authorities%20vaccine_indicators/en/index.html/">http://www.who.int/immunization_standards/national_regulatory_authorities%20vaccine_indicators/en/index.html/</a>



Summary sheet

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Title	<b>DEVELOPPING A NATIONAL SYSTEM FOR DEALING WITH ADVERSE EVENTS FOLLOWING IMMUNIZATION</b>
Summary	Although vaccines are among the safest of pharmaceuticals, the occasional severe adverse events or cluster of adverse events associated with their use may rapidly become a serious threat to public health. Equally important is the need for an enlightened and informed national system to be in place to deal with public concerns and rapid evaluation of the risk to public safety when adverse events occur. Described in this article is the outcome efforts made by the WHO Global Training Network to describe a simple national system for dealing with vaccine safety and with emergencies as they arise. The goals of a training programme designed to help develop such a system are also outlined.
Field	Programmatic
Topics	Immunization safety
Key words	AEFI, surveillance system, vaccine safety, training, GTN
Type of tool	article
audience	Central
Author	WHO
Année	2000
Version status	Final version
Language	English, french
Format of document	Electronic downloadable document - .pdf format
Nb of pages	8
Internet link	<a href="http://www.who.int/bulletin/archives/78(2)170.pdf">http://www.who.int/bulletin/archives/78(2)170.pdf</a>

Title	<b>How to address events allegedly attributable to vaccination or immunization ?</b>
Summary	<p>The purpose of this document is to provide health workers with principles and procedures that should be followed in addressing concerns about vaccination risks. Proper implementation of this guide will aid in the acquisition of additional information on possible events allegedly attributable to vaccination or immunization (ESAVI). These data should be complemented with the information compiled in other analytic studies, such as clinical trials, thus maintaining confidence in the national immunization program.</p> <p>It is hoped that this document will assist health workers in establishing adequate mechanisms for:</p> <ul style="list-style-type: none"> <li>• determining the quality and safety of vaccines;</li> <li>• knowing the rates of events that may be related to vaccines;</li> <li>• reporting, investigating, and analyzing the events that are supposedly related to vaccines;</li> <li>• taking steps to solve any problem identified in the investigation and to face any crisis;</li> <li>• communicating efficiently and effectively with the community and with the communications media;</li> <li>• reporting to parents on the events related to vaccines and on the diseases against</li> </ul>
Field	Programmatic
Topics	Immunization safety
Key words	Vaccine quality and safety, AEFI, investigation, communication and information
Type of tool	guideline
audience	Central
Author	PAHO
Année	2002
Version status	Final version
Language	English
Format of document	Electronic downloadable document. Pdf format
Nb of pages	29
Internet link	<a href="http://www.who.int/immunization_safety/publications/aefi/en/immunization_safety_E.pdf">http://www.who.int/immunization_safety/publications/aefi/en/immunization_safety_E.pdf</a>

**Summary sheet**

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Title	<b>GLOBAL FRAMEWORK FOR IMMUNIZATION MONITORING AND SURVEILLANCE SYSTEM</b>
Summary	<p>The global immunization partners have a vision of a world that, by 2010, benefits from an integrated epidemiological, laboratory and programme monitoring network dedicated to optimizing the surveillance of vaccine preventable diseases (VPDs) and monitoring of immunization programme performance. This network will provide the high quality information needed to measure the impact of vaccines and to maximize their safe, effective and equitable use at country, regional and global level to reduce or eliminate the burden of VPDs.</p> <p>This document defines and describes the essential components of the global framework, factors contributing to changes in the VPD surveillance and programme monitoring landscape, goals and objectives, the anticipated impact of reaching these goals and also the risks of failing to reach them by 2010.</p>
Field	Programmatic
Topics	Immunization policy, general information on EPI
Key words	AEFI, disease surveillance system, monitoring system, GIVS
Type of tool	Guideline
audience	Central
Author	WHO-CDC
Année	2007
Version status	Final version
Language	English
Format of document	Electronic downloadable document - .pdf format
Nb of pages	56
Internet link	<a href="http://whqlibdoc.who.int/hq/2007/WHO_IVB_07.06_eng.pdf">http://whqlibdoc.who.int/hq/2007/WHO_IVB_07.06_eng.pdf</a>

**Summary sheet**

**30**

Title	<b>WHO-recommended standards for surveillance of selected vaccine-preventable diseases</b>
Summary	<p>This document provides recommendations on the WHO surveillance standards for selected vaccine-preventable diseases. It reviews the rationale for surveillance of each disease, as well as recommended case definitions, types of surveillance, data elements to collect, data analyses, and uses of data for public health decision making.</p> <p>The recommendations are aimed at national-level surveillance staff and should be adapted according to national priorities and needs. This document replaces WHO/EPI/GEN/98.02 Rev.2.</p>
Field	Programmatic
Topics	Vaccine preventable disease surveillance
Key words	Vaccine preventable disease surveillance, case definition, standards, data management and analysis
Type of tool	guideline
audience	Central
Author	WHO
Année	2003
Version status	Final version
Language	English
Format of document	Electronic downloadable document - .pdf format
Nb of pages	34
Internet link	<a href="http://whqlibdoc.who.int/hq/2003/WHO_V&amp;B_03.01.pdf">http://whqlibdoc.who.int/hq/2003/WHO_V&amp;B_03.01.pdf</a>

Summary sheet

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Title	<b>Advocacy : a practical guide : with polio eradication as a case study</b>
Summary	<p>This practical guide outlines four basic steps that are essential for an effective advocacy initiative — documenting the situation, packaging the message, working with the media and mobilizing others. It contains specific examples and ideas, and leaves it up to the user to pick and choose.</p> <p>Obviously, the advocacy strategy varies from target group to target group and from country to country. What works for politicians in Oslo does not necessarily work with health experts in Delhi.</p> <p>Users of this guide are encouraged to select the parts of this booklet that they find useful, borrow successful ideas from others, adapt these creatively to suit their own environment, be innovative, positive and active.</p>
Field	Programmatic
Topics	Communication, advocacy, social mobilization
Key words	Advocacy, strategies, communication, media
Type of tool	guideline
audience	Central
Author	WHO
Année	1999
Version status	Final version
Language	English
Format of document	Electronic downloadable document - .pdf format
Nb of pages	36
Internet link	<a href="http://whqlibdoc.who.int/hq/1999/WHO_V&amp;B_99.20.pdf">http://whqlibdoc.who.int/hq/1999/WHO_V&amp;B_99.20.pdf</a>

**Summary sheet**

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Title	<b>Immunological basis for immunization</b>
Summary	Immunization in Practice is designed for health workers who give immunizations. There are seven modules: target diseases, vaccines, cold chain, ensuring safe injections, planning to reach every child, organizing immunization sessions and monitoring and evaluation. The material may be used in whole or in part, for pre service education in academic institutions, basic training for newly appointed health workers, refresher training, self-instruction and on-the-job reference.
Field	Programmatic
Topics	training
Key words	Training material, immunization basics, target disease, vaccines, cold chain, safe injection, planning to reach every child, organizing immunization session, monitoring and evaluation
Type of tool	guideline
audience	Central
Author	WHO
Année	2004
Version status	updated version
Language	English
Format of document	Electronic downloadable document - .pdf or .doc format
Nb of pages	36
Internet link	<a href="http://www.who.int/vaccines-documents/DoxTrng/h4iip.htm">http://www.who.int/vaccines-documents/DoxTrng/h4iip.htm</a>

Summary sheet

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Title	<b>Immunological basis for immunization</b>
Summary	This set of training modules document may be used as a reference source, as part of training curricula or as a training aid. It contains clear descriptions of the following aspects of vaccine preventable diseases : the organism and the disease, the immunological response to natural infection, the response to immunization, current WHO recommendations and future prospect. 11 modules have been published and are regularly updated. (first edition in 1993) .
Field	Programmatic
Topics	training
Key words	training material, immunological basics, diphteria, tetanus, pertussis, tuberculosis, polio, measles, yellow fever, haemophilus influenzae, rubella, varicella-zoster virus
Type of tool	Guidelines
audience	Central
Author	WHO
Année	1993
Version status	updated version
Language	English - french
Format of document	Electronic downloadable document - .pdf or .doc format
Nb of pages	36
Internet link	<a href="http://www.who.int/immunization/documents/IVB_doc_catalogue.pdf">http://www.who.int/immunization/documents/IVB_doc_catalogue.pdf</a> <a href="http://www.who.int/vaccines-documents/DoxTrng/h4tibi.htm">http://www.who.int/vaccines-documents/DoxTrng/h4tibi.htm</a>

Summary sheet

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Title	<b>Mid level management course for EPI manager</b>
Summary	<p>The aim of MLM training is to enable immunization managers at all levels to acquire skills in planning, management, monitoring and evaluation. It will also give them the knowledge to supervise and support immunization operations such as service delivery, the cold chain and logistics, purchase and quality control of vaccines, communication in support to the programme.</p> <p>The intermediate course also proposes a general framework for resolving problems encountered in EPI. Hence, the problem-solving approach is the basics teaching method used in all the modules of the intermediate course.</p>
Field	Programmatic
Topics	training
Key words	Training material, immunization basis, communication and mobilisation in support of immunization, planning, logistics, cold chain, vaccine safety, mass campaign, disease surveillance, monitoring, supervision, evaluation
Type of tool	guideline
audience	Central, mid level
Author	WHO
Année	2004
Version status	updated version
Language	English - french
Format of document	Electronic downloadable document - .pdf or .doc format
Nb of pages	14 modules
Internet link	<a href="http://www.afro.who.int/ddc/vpd/epi_mang_course/">http://www.afro.who.int/ddc/vpd/epi_mang_course/</a>



**Summary sheet**

**35**

Title	<b>EPIVAC courses</b>
Summary	EPIVAC is a training programme dedicated to manager at district level, involved in EPI activities, to strengthen their knowledge and skills. It provide a combination of EPIVAC curriculum, which combines two fields of expertise such as management and vaccinology, is validated by a 3rd cycle Inter-University Diploma issued by the Universities of Paris-Dauphine (France) and Cocody-Abidjan (Cote d'Ivoire).
Field	Programmatic
Topics	Training
Key words	Training material, immunization basis, immunological basis, disease surveillance, logistics, cold chain, communication, social mobilisation, planning, vaccine safety, monitoring, supervision, evaluation, management, human resources, financing, economy, partnership
Type of tool	guideline
audience	Central, mid level
Author	AMP
Année	2009
Version status	Regularly updated
Language	french
Format of document	On line (restricted access), cd-rom
Nb of pages	
Internet link	<a href="http://epivac.org/index.php?rubrique=DIUPresentation1">http://epivac.org/index.php?rubrique=DIUPresentation1</a>

Summary sheet

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Title	<b>Advanced immunization management (AIM) Consideration for introduction of new and under utilized vaccines</b>
Summary	<p>This set of e-Learning modules introduces new and underutilized vaccines and the diseases they prevent. Included is how to assess whether your immunization programme would benefit from adding a new vaccine and how to prepare for vaccine introduction.</p> <p><a href="#">Group A meningococcal conjugate vaccine</a> (English and French)  <a href="#">Hepatitis B vaccine</a> (English, Russian, and French)  <a href="#">Japanese encephalitis vaccine</a> (English) - updated 2009  <a href="#">Rotavirus vaccine</a> (English)</p>
Field	Programmatic
Topics	Training
Key words	Training material, on-line training, new vaccine introduction, Group A meningococcal conjugate vaccine, Hepatitis B vaccine, Japanese encephalitis vaccine, Rotavirus vaccine
Type of tool	guideline
audience	Central,
Author	PATH
Année	2000
Version status	Regularly updated
Language	English - french
Format of document	On line documents – cd-rom
Nb of pages	4 modules
Internet link	<a href="http://aim.path.org/modules_en.html">http://aim.path.org/modules_en.html</a>

Summary sheet

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Title	<b>Global immunization news</b>
Summary	<p>Published by WHO, Global Immunization News (GIN) gives a comprehensive look at immunisation activities worldwide</p> <ul style="list-style-type: none"> <li>• Technical Information</li> <li>• GAVI-related information: Next GAVI review dates, GAVI Partners' Forum</li> <li>• Country information by region</li> <li>• Calendar of regional meetings and events related to immunisation</li> </ul>
Field	Programmatic
Topics	Immunization policy, general information on EPI
Key words	Technical Information, GAVI-related information, Country information, Calendar of regional meetings and events related to immunisation
Type of tool	publication
audience	Central
Author	WHO
Année	2009
Version status	Regularly updated
Language	English
Format of document	Electronic downloadable document. Pdf format
Nb of pages	
Internet link	<a href="http://www.gavialliance.org/media_centre/publications/gin.php">http://www.gavialliance.org/media_centre/publications/gin.php</a>

Summary reference	Title	Field	Topic	Tool type	Author / institution
1	Procurement of vaccines for public sector programmes A reference manual	logistics	supply chain	guideline	WHO
2	WHO list of vaccines for purchase by UN agencies as of July 2009 (listed by vaccine)	logistics	supply chain	guideline	WHO
3	Adopting global vaccine management policy for national use	logistics	supply chain	guideline	WHO
4	Optimize - Landscape analysis Trends in vaccine availability and novel vaccine delivery technologies: 2008-2025	logistics	supply chain	guideline	WHO PATH
5	Optimize - Landscape analysis Analysis of cold chain technologies	Logistics	supply chain	guideline	WHO PATH
6	Equipment performance specifications and test procedures E1, E3, E4&E11, E5, E6, E7, E10	Logistics	EPI general logistics	guideline	WHO
7	CCEM 1.0 :Cold Chain Equipment Management inventory tool	Logistics	supply chain	software	WHO UNICEF PATH
8	Vaccine presentation assessment tool	logistics	supply chain	software	VPPAG
9	EPI log forecasting tool	logistics	EPI general logistics	software	WHO
10	Preparation of national health-care waste management plans in sub-saharan countries	programmatic	Immunization safety	guideline	Secretariat of the Basel Convention, WHO
11	safe health care waste management : policy paper	programmatic	Immunization safety	guideline	WHO
12	Technet 21	Logistics	EPI general logistics	web site	Technet
13	Strategic advisory group of expert SAGE) - reports	programmatic	Immunization policy, general information on EPI	guideline	WHO
14	Global advisory committee on vaccine safety (GACVS) - reports	programmatic	Immunization safety	guideline	WHO
15	Global immunization vision and strategy 2006-2015 - GIVS	Programmatic	Immunization policy, general information on EPI	guideline	WHO UNICEF
16	WHO position paper on vaccines	Programmatic	Immunization policy, general information on EPI	guideline	WHO
17	WHO-UNICEF guidelines for developing a comprehensive multi year plan (cMYP)	Programmatic	Immunization policy, general information on EPI	guideline	WHO-UNICEF
18	Vaccine introduction guidelines Adding a vaccine to a national immunization programme: decision and implementation	Programmatic	new and under used vaccines	guideline	WHO
19	Introduction of Haemophilus influenzae type b vaccine into immunization programmes - management guideline	programmatic	new and under used vaccines	guideline	WHO
20	Detailed Review Paper on Rotavirus Vaccines	programmatic	new and under used vaccines	guideline	Ad-hoc group of experts on rotavirus vaccines
21	Human papillomavirus and HPV vaccines: Technical information for policy makers and health professionals	programmatic	new and under used vaccines	guideline	WHO

22	Strategies, policies and practices for immunization of adolescents	Programmatic	Immunization policy, general information on EPI	guideline	WHO
23	Review of existing documents on planning, performance and assessment of clinical studies on vaccines	programmatic	national regulation authority	guideline	WHO
24	Regulation of vaccines: building on existing drug regulatory authorities	programmatic	national Regulation Authority	guideline	WHO
25	Strengthening national regulation authorities - Aide mémoire	programmatic	national regulation authority	guideline	WHO
26	Vaccine indicator - Assessment tool on existing drug regulatory authority	programmatic	national Regulation Authority	guideline	WHO
27	Developping a national system for dealing with adverse events following immunization	Programmatic	Immunization safety	guideline	WHO
28	How to address events allegedly attributable to vaccination or immunization	Programmatic	Immunization safety	guideline	PAHO
29	Global framework for immunization monitoring and surveillance	Programmatic	vaccination preventable disease surveillance	guideline	WHO-CDC
30	WHO recommended standards for surveillance of selected vaccine preventable diseases	Programmatic	vaccination preventable disease surveillance	guideline	WHO
31	Advocacy - a practical guide: with polio eradication as a case study	programmatic	Communication, advocacy, social mobilisation	guideline	WHO
32	Immunization in practice. A practical resource guide for Health workers	programmatic	training	guideline	WHO
33	immunological basis for immunization	programmatic	training	guideline	WHO
34	Mid level management course for EPI manager	programmatic	training	guideline	WHO
35	EPIVAC course	programmatic	training	guideline	AMP
36	Advanced Immunization Management (AIM)	programmatic	training	guideline	PATH
37	GIN: Global immunization news	Programmatic	Immunization policy, general information on EPI	newsletter	WHO